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Crisco's Double-Duty Recipes

No. 5 Doughnuts

MAKE 'EM PLAIN . . .

MAKE 'EM FANCY . . .

DROP DOUGHNUT BALLS

(Yield: 3 dozen)

1 egg
⅓ cup sugar
½ cup milk
1 tablespoon melted Crisco
1½ cups sifted flour
½ teaspoon salt
2 teaspoons baking powder
½ teaspoon nutmeg
½ teaspoon cinnamon
Crisco for deep frying

Combine egg, sugar, milk and melted Crisco. Mix flour, salt, baking powder and spices. Combine the liquid and dry ingredients. Mix until well blended.

Drop from a teaspoon into deep Crisco heated to 365° F. (or when an inch cube of bread browns in 60 seconds). Fry doughnut balls until brown and cooked in center (about 4 minutes). Drain on absorbent paper. Roll in powdered sugar, if desired.

GLAZED ORANGE DOUGHNUTS

(Yield: 10-12)

1 egg
½ cup sugar
⅓ cup orange juice
2 tablespoons grated orange rind
1 tablespoon melted Crisco
2 cups sifted flour
½ teaspoon salt
2 teaspoons baking powder
Crisco for deep frying

Combine egg, sugar, orange juice and rind and melted Crisco. Mix flour, salt and baking powder. Combine the liquid and dry ingredients and mix until well blended. Roll dough on a lightly floured board to ½" thickness. Cut with floured doughnut cutter. Fry in Crisco heated to 365° F. until golden brown on both sides (3 to 5 minutes).

To glaze, combine ½ cup confectioners' sugar and 1 tablespoon orange juice. Spread on doughnuts. Decorate with chocolate "sprinkle" or chopped nuts.

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Chop Suey on Rice
Mixed Green Salad
Custard with
Glazed Orange Doughnuts
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FINE FLAVOR, low fat absorption, even browning, digestibility . . . these are all results that students strive for in a deep-frying lesson. And with pure, all-vegetable Crisco, it's easy for them to score high on every count. Students also appreciate the absence of unpleasant smoke and odor in frying with Crisco, as well as the fact that it can be re-used.

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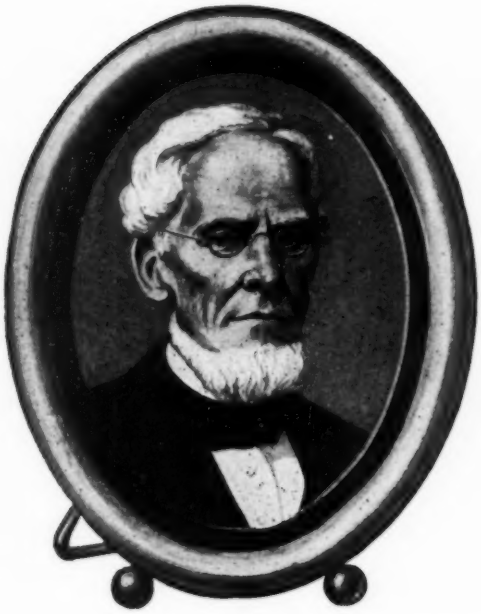

...because he didn't

You might have passed him by... this old man whose eyes shone with a young man's purpose. He was fifty-six, and his hair and beard were white. His clothes were threadbare. He was penniless and being sued for debt besides. He had tried many things and had known failure. But he had three assets left: Integrity, the will to win, and a good name. This was Gail Borden...

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BANANA OATMEAL COOKIES

- 1½ cups sifted flour
- 1 cup sugar
- ½ teaspoon baking soda
- 1 teaspoon salt
- ¼ teaspoon nutmeg
- ¾ teaspoon cinnamon
- ¾ cup shortening
- 1 egg, well-beaten
- 1 cup mashed ripe bananas* (2 to 3 bananas)
- 1¾ cups rolled quick oats
- ½ cup chopped nuts

Sift together flour, sugar, soda, salt, nutmeg and cinnamon into mixing bowl. Cut in shortening. Add egg, bananas, rolled oats and nuts. Beat until thoroughly blended. Drop by teaspoonfuls, about 1½ inches apart, onto ungreased cookie pans. Bake in a moderately hot oven (400° F.) about 15 minutes, or until cookies are done. Remove from pan immediately. Makes about 3½ dozen cookies.

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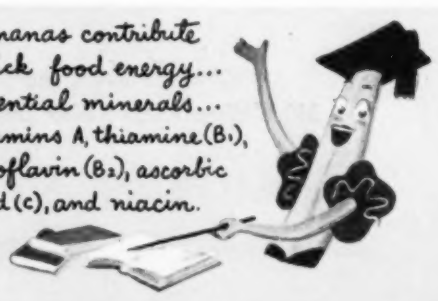

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JOURNAL OF *Home Economics*

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Contents *April 1953*

Volume 45, Number 4

PAGE

Newer Insights in Family Living. *Robert G. Foster* ... 229
Scholarships Reveal Nations' Similarities. *Marion H. Steele* ... 232
Human Utilization of Ascorbic Acid: A Review of Publications. *Jessie Whitacre* 235
Home Economics in Television. *Ellen Pennell* ... 239

Research

The Gelation of Pectin in Uncooked Jam from Frozen Red Raspberries and Strawberries. *Mary Akers Kramer* and *Gertrude Sunderlin* ... 243
Changes in Appearance of Women 45 to 65 Years of Age Which Affect Use of Ready-to-Wear Garments and Commercial Patterns. *Margaret Harris Blair* ... 248
Does Adequately Fertilizing the Land Affect the Health of People Living on It? *Willamay T. Dean* ... 251

DEPARTMENTS

Our Readers Say ... 225
Washington News ... 228

College Clubs
My Career as Home Economist-Artist-Manufacturer. *Esther S. Dendel* ... 257

In Short
Alumnae Evaluate Homemaking Program. *Katharine S. Rudeseal* ... 259
The 4-H Club Home Improvement Program. *Agnes M. Hansen* ... 260
Preserving Our Textile Heritage. *Mary C. Whitlock* ... 261

Comment ... 263

44th Annual Meeting of the AHEA
Tentative Program ... 264
Welcome to Kansas City. *Maxine Erickson* ... 265
Scenic Missouri. *Frances Kerley* ... 265

AHEA Activities
AHEA Cards for Edinburgh Meeting ... 266
American Council on Education Meeting. *Berenice Mallory* ... 266
An Invitation to the 1953 National Conference of Social Work. *Luise K. Addiss* ... 267
Local Health Services Conference. *Gladys Strawn* ... 268
Public Relations Exchange ... 268

The BHNHE Reporting. *Emily C. Davis* ... 269
Abstracts ... 270
New Books ... 279
From the Editor's Mail ... 282
News Notes ... 284

Indexed in Readers' Guide to Periodical Literature

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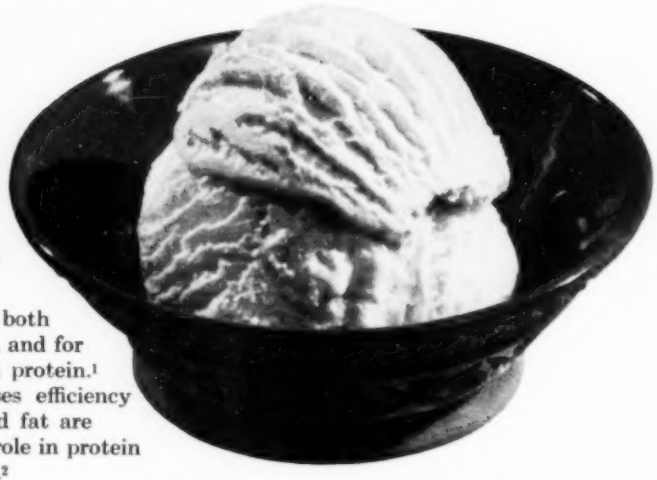
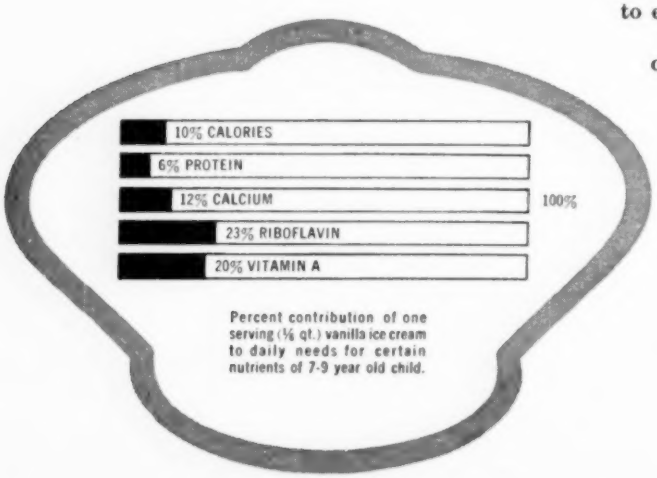
Notice of change in address should be received six weeks before the date of issue on which the change is to take effect. Both the *old address* and the *new address* should be given.

For normal growth in children . . .

ICE CREAM plays an important role in many children's diets because of its nutrient content and appetite appeal. For normal growth in children the diet must supply fat, carbohydrate, protein, minerals, and vitamins—for energy and for building tissues and maintaining body functions. It has been found that children's appetites can't always be depended upon to provide enough calories for satisfactory growth.[1]



Adequate calories are necessary for both "visible growth," measured by gain in weight, and for "invisible growth," measured by gains in protein.[1] Increasing the energy intake increases efficiency of protein utilization.[2] Both carbohydrate and fat are effective, but fat appears to play a special role in protein utilization and improved growth rates.[2]



A serving of vanilla ice cream supplies, in addition to energy, nearly one-fourth of the day's riboflavin need for a 7 to 9 year old child, one-fifth of the vitamin A, and more than one-tenth of the calcium, as well as some of all the other important milk nutrients.[3]

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[1]Macy, I. G. and Hunscher, H. A. Calories—a limiting factor in the growth of children. J. Nutr. *45*:189 (Oct.) 1951.

[2]Geiger, E. Extra caloric function of dietary components in relation to protein utilization. Fed. Proc. *10*:670 (Sept.)1951.

[3]Dahlberg, A. C. and Loosli, J. K. Nutritive value of commercial ice cream. J. Am. Diet. Assn. *24*:20 (Jan.) 1948.

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Our Readers Say

Munich Education Service Center Described

Munich, Germany

This is to acknowledge the receipt of your invitation for the renewal of our subscription to your journal for the year 1953. Through the co-operation and support of the U. S. High Commissioner for Germany, we were fortunate enough to get your educational journal for our educational library, which is part of the Education Service Center Munich. Perhaps it will be of interest to you to get some background on the objectives of the Education Service Center Munich.

The Education Service Center Munich was set up by American Authorities in 1947 and then was taken over by German authorities in July 1952. The main purpose of the Education Service Center is to provide all types of teachers in Munich and the surrounding areas with the opportunity to participate in an in-service training program which is carried on throughout the whole year by way of lectures, workshops, courses, discussion groups, and so forth. There are a number of such activities daily, mainly on educational subjects. The lectures, discussions, courses, and so forth, are, however, not only provided for teachers and prospective teachers but also for other Munich citizens interested in education. The purpose of the Education Service Center is threefold: (1) to provide teachers with all kinds of possibilities of improving their education and getting acquainted with modern methods in education, (2) to try to bring about a greater interest and better relationship between the school and the community, and (3) to promote better international understanding. Thus far, the programs of the Education Service Center have been very successful and have reached a large part of the population of Munich. Through the great variety of educational activities and particularly through its regular parents' meetings it has become one of the most popular institutions in Munich. The average attendance is as high as 4,000 visitors per month, one-third of whom are parents and other interested citizens. All activities are free of charge.

Attached to the Education Service Center Munich is an educational library comprising about 30,000 German and English volumes on education and similar subjects. The library is open nine hours daily and has a monthly attendance of about 1,000 teachers. Approximately 1,300 German and American books are loaned out every month for home study or are mailed out to readers in rural areas. A special attraction for a number of English speaking teachers is the availability of American magazines. Your JOURNAL OF HOME ECONOMICS was of particular value to our library since it was among those that found greatest approval by our readers. It gives German teachers a particularly good and clear picture of an insight into modern methods of education in the United States which has stimulated their own efforts a great deal.

Anton Fingerle

Superintendent of Munich Public Schools

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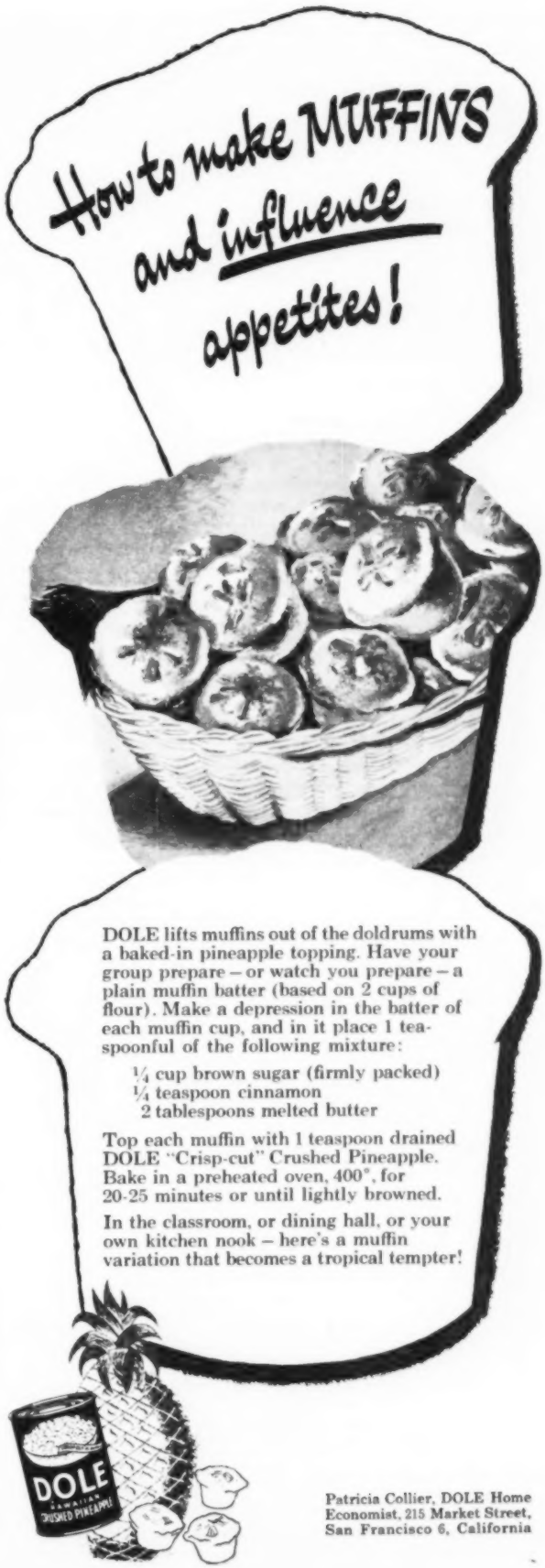

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Washington News

United States Responsibility for World Leadership in 1953

• **"The United Nations** has not succeeded—it has not failed—it is on the way" concluded representatives of 110 organizations called together in Washington, D. C., on March 1, 2, and 3 by the American Association for the United Nations for a national conference on United States Responsibility for World Leadership in 1953. Through the delegates of the more than a hundred organizations present at the Conference, half of the population of the United States was represented. AHEA members were represented through their international committee by the writer, Marietta Henderson, Flemmie Kittrell, Berenice Mallory, and Louise Stanley.

• **Secretary of State John Foster Dulles** spoke at the opening session. Mrs. Franklin D. Roosevelt, until recently an official United States representative to the United Nations and currently devoting much of her time to the AAUN, urged the Conference delegates to take home with them the realization that "We, the people in every community in the United States are what democracy actually is" and to "be sure to bring to the consciousness of as many people in this country as you can . . . what the UN has done. We need to show the connection between the things we have done through the agency of the United Nations and through the action groups [or specialized agencies of the UN]." Mrs. Roosevelt reminded the Conference, too, that while the majority of the people in the United States do believe in the United Nations, there is a vociferous minority which attacks it.

• **"What is needed now,"** said the AAUN in its call to the Conference,

> is a bold educational program on what the United Nations was set up to do, what it is accomplishing, what are the problems before it and how its proceedings could be improved. Above all, the program should discuss the dynamic leadership which the United States should give to the United Nations.

• **Choosing President Eisenhower's inaugural** declaration that "Respecting the United Nations as the living sign of all people's hope for peace, we shall strive to make it not merely an eloquent symbol but an effective force" as its keynote, the resolutions committee of the Conference formulated resolutions which included the following:

> We are here to express to the new administration and the Congress the concerted views of our diverse groups, united in the purpose of supporting every action and program which implement the United Nations responsibilities of our country and contribute to making the United Nations "an effective force."
>
> Although every public opinion poll shows overwhelming support for the United Nations, we are aware of increasing opposition by determined forces. We note with concern growing counsels which would in effect abandon the United Nations, withdraw American participation, and nullify effective international agreements. We note and oppose resolutions introduced in Congress to withdraw, and others to cripple by constitutional amendment the historic treaty-making power. . . .
>
> Every new obstacle in the search for peace and security is invoked by the opponents to weaken support of the United Nations. Misinformation and unjustified fears confuse and discourage a public not yet sufficiently armed with specific knowledge to combat them.

• **The American Association for the United Nations** seeks to gather for the United Nations a United States citizenry which is informed and alert to the problems connected with the fight against war, hunger, disease, ignorance, and discrimination. It seeks also a citizenry to understand the United Nations Charter as they would the Constitution or other flexible codes of laws.

The AAUN approaches its year-round job through its policy suggestions to the government and to the UN, through its information program for national organizations, and by going directly to the people.

• **The AHEA representatives** from AHEA'S international committee met at the close of the Conference to consider the implications of the meeting for home economists. They recommend that the AHEA membership support the activities of the American Association for the United Nations and of other groups working for the United Nations. They recommend, too, that every home economist should also be alert to false statements about the United Nations and should try to defeat such statements as soon as they appear.

HAZEL M. HATCHER
Chairman, AHEA International Committee

VOLUME 45, NUMBER 4, APRIL 1953

JOURNAL OF Home Economics

Newer Insights in Family Living

Robert G. Foster

Dr. Foster is director of the Marriage Counseling Service and Training Program of The Menninger Foundation for Psychiatric Treatment, Education, and Research. He is also president of the National Council on Family Relations.

THE most significant trend in family research which has taken place in the past 30 years has been the breaking down of special disciplines in an attempt to develop an interdisciplinary approach to the solution of many of the practical problems of marriage and the family. With the development of scientific research methods and an emphasis upon the field of pure science over the latter part of the nineteenth century and the earlier part of the twentieth century, various disciplines were emphasizing the ways in which to differentiate between a piece of sociological, or psychological, or biological, or economic, or other form of research problem related to the individual or to a group of individuals. Since about 1930 there has been a marked trend in individual disciplines undertaking to do two things: first, to continue to conduct departmental research with some interdepartmental emphasis in a few places; second, to engage in the field of what I would call "clinical practice," or the application of their professional fields to the practical problems of helping people with the problems of everyday living.

This second trend in and of itself is not bad, but I think that it has led to a great deal of confusion and has resulted in less valid and reliable research on which to base practical programs of endeavor than we might have had, had many of the disciplines continued to emphasize a particular or collaborative type of scientific contribution to the problems of human living.

Changing Family Life Problems

Fifty years ago we courted with a horse and buggy. We shopped a very few miles from home; we knew most of the people in our block and neighborhood; we were essentially a small town nation; we went to church; there were no motion pictures, radios, or automobiles to complicate our lives. Most farm families, and most families were farm families, lived within a radius of about 20 miles from their parental home.

Today sons and daughters live hundreds, or even thousands, of miles from their parental home and the family itself may be in one part of the country today and in a totally different part tomorrow. Today we have small families, much mobility, wider social and trade areas, the radio, motion pictures, the automobile, airplanes, streamliners, and television. There is less family, church, or other social control, particularly in cities, than there was 50 years ago. The population is predominantly an aging one. Fathers spend less and less time with wives and children. The consequence is that the individual has tenuous family security, with few stabilizing influences to help him live a healthy life, and that he is, of necessity, under greater stress and strain of living. When the values of any society become confused, its people become mentally and socially sick and its families, which are the producing units of the society, are unable to perform their legitimate function in the production and training of children who can live in accordance with the values and ideals of that particular society. In our society today we find present those elements which can produce a mentally sick society. In some respects we have become a mentally sick society. We cannot blame the family for failing nor for many of the failures of today. Until we as a nation have a positive program of values for which we will fight as hard as we are willing to fight to resist other ideologies, it will be impossible for our families to produce the kind of citizens who can live in peace, in harmony, and in good mental and social health in our society. We may think that we have values which we believe in, but I am convinced that we

give lip service to such factors as the importance of children, family life, human personality, and human welfare.

Presentation in Textbooks

If we go back and look at the textbooks of the 1920's, we find a great preponderance of historical information, a little sociological data of a descriptive nature, and considerable statistical and other census information about marriage and about family.

If we look at the textbooks today we find a great deal more information on personality development, personality structure and function, types of personality deviation, therapeutic methods of dealing with personal and family problems, a little bit on the psychological testing approach to understanding individuals and families, and quite a lot of information on dating, courtship, engagement, and on those types of relationships within families which exist and interfere with the child's school adjustment and the adults' adjustment to one another. There is little on the social dynamics of living, but this will, no doubt, appear soon, and we do find that many of the workshops around the country are including a discussion of such things as group dynamics, role playing, sociodrama, and other similar processes.

We might almost say that we have moved for the past 30 years from a historical, anthropological, statistical approach to the study and understanding of marriage and the family to what might be called a "mental health for better living" slogan around which the orientation of many courses in this field is now tending.

Obstructive Current Emphasis

If, for example, one looks over the rather extensive classified bibliography of articles, books, and pamphlets on sex, love, marriage, and family relationships, published in the May 1951 issue of *Marriage and Family Living*, one gets some idea of the general nature of current material. Taking just the 150 items which appeared in the field of marriage and family relationships, one finds a very small proportion of them making any research contribution to the field.

It appears to me that something has happened in the course of the past 20 or 30 years which has been detrimental to the development of basic research upon which to base practical programs. The trend away from scientific thinking to a more clinical and practical-application thinking is not bad in and of itself, but it does depend upon who does the practical and clinical application. It is a significant sign of the times that many are concerned with the welfare of the family and that the public is interested in obtaining help and advice, but this fact does not make every public utterance of a sociologist or a judge of a domestic relations court valid data upon which to teach, counsel, and pass legislation.

I am very much concerned with the confusion that exists between the applied field of home and family education and that of scientific inquiry. If we take engineering as an illustration of the field of professional training which attempts to apply the findings of the basic sciences to the problems of engineering effort, we have a good analogy to home economics, social work, education, and medicine.

The departments of physics and mathematics, for instance, do not assume that it is their function to train engineers but rather to provide the basic science through research and teaching which is fundamental to the training of engineers. They seem to recognize their function and have made great contributions in their field. On the other hand, the departments of psychology, sociology, and other social sciences in many cases seem to feel that, although theirs is a scientific job comparable to that of physics and chemistry, it is also their job to engage in the training of practitioners in seemingly all fields of human relations, such as child development, family counseling, family life education, and other practical fields which legitimately, in my opinion, belong to the professional schools of home economics, social work, medicine (particularly psychiatry), and others.

Certainly anyone who is doing graduate work in the field of marriage and the family should read chapter seven in A. H. Hobbs' book *The Claims of Sociology: A Critique of Textbooks*. This chapter deals with the marriage and family material in 83 textbooks which are used in over 600 courses given in 550 colleges and universities throughout the United States. The most illuminating and disturbing part of the chapter has to do with his summary and critique of what he found in an analysis of these texts. For example, in answer to the question, do marriage and family data in texts rest on sufficient scientific evidence to justify the widened current presentation, the author says, *"The presentation of material is largely in terms of a sociological point of view, rather than in terms of the selection of the best available evidence from various fields."*

Furthermore, Mr. Hobbs writes:

The temptation to present greater and greater numbers of facts is particularly enticing in this field, which has expanded so much in popularity with such little scientific basis. This temptation should be resisted, and the limitations of anthropological data in particular and of Pearsonian empiricism in general, as bases for interpreting changes in the family, should receive more critical attention than they do.

Recommendations in textbooks about relations between the two sexes which incorporate appreciation of possible influences of biological bases of sexual differences might be sounder than a desperate effort to ignore or deny them because they do not fit into a preconceived pattern of what the authors believe they should be.[1]

An analytical observer must wonder why texts minimize the importance of factors associated with biological drives in one context and emphasize the importance of biological factors associated with biological drives in another context.

An increasing percentage of texts strongly recommend sex education but fail to specify the nature of such training. A topic so replete with major social ramifications would appear to merit much more careful treatment than it is accorded.

Marriage and divorce rates are used as indices often fallaciously. The most comprehensive and precise analysis of marriage rates and age at marriage is found in Monaghan's *Pattern of Age at Marriage in the United States*, published in 1951. This two-volume monograph lends no support to the widely held claims that marriage rates are increasing and the average age for first marriage is decreasing.[2]

Loss of familial functions is also popular with an explanation of weakening the family organization. To point out that decline in procreative, economic, educational, and religious function weakens traditional family organizational ties is highly persuasive but a somewhat specious argument.

The assumption that affectional functions compensate for renunciation of other functions, increasing as other functions decrease, and as the number of objects of affection is reduced by childless or one-child marriages, is without solid foundation. More than half of such marriages now end in divorce, but authors of sociology texts, who place so much credence on empirical trends in other categories, virtually ignore this problem of relationship between the presence of children within the family and the strength of the family organization.

The strongest single educational trend which seems to me to be blocking the solution of these social problems that we call family problems, is the almost total lack of scientific inquiry into the family behavior and the influences affecting family life.

Our present textbooks on marriage and the family are for the most part filled with studies which at best have never been validated by repetition. Even worse, hundreds of questionnaire studies, almost never rechecked under other conditions by other scientists, are quoted, which do not in any sense constitute the basis for a fundamental science upon which to train practitioners in marriage and family fields. One also is somewhat concerned with the large number of check list items found in textbooks, and popular versions of textbooks, from which an individual can discover his love IQ, or some other phenomenon equally as unimportant and misleading. If the sciences basic to an understanding of human and family relations are going to devote themselves to this kind of technological horseplay, it is high time that home economics builds a scientific foundation for understanding marriage and family problems, as was done in the case of nutrition research in previous years.

Development of Scientific Research

If we are to accomplish many of the things we talk about in terms of being of real service to families as home economists, as social workers, as engineers, as educators, and so on, it seems to me that we must encourage and almost insist that our discipline departments in colleges and universities devote their time to development of sound and fundamental scientific research and leave the application of these findings in a practical and clinical sense to the technological fields of home economics, social work, engineering, education, and medicine.

In conclusion, then, I would say that there are three trends which are significant and worth attention. First, there is the slight trend toward interdisciplinary research, which needs to be supported and given further emphasis. Second, there is a trend toward various disciplines going into clinical practice, which I think is a trend which should be discouraged. And third, and finally, because of trend number two, too few individual disciplines are doing fundamental scientific research upon which to base practice by those who are engaged in professional work. The orientation of their research should be recast in light of the Burgess-Cottrell-Foote Report on New Directions of Research on the American Family, to be published shortly by the Social Science Research Council.

[1] A. H. Hobbs, *The Claims of Sociology: A Critique of Textbooks*. Harrisburg, Pennsylvania: Stackpole Company, 1951.

[2] *Ibid.*

Scholarships Reveal

Odette Marie-Thérèse Dutrieux *of Paris, France, the fifth Helen W. Atwater fellow, is AHEA's first international student to study at the University of Alabama. She has taught home economics in the public schools of Paris since 1947 and last year was also in charge of advising managers and workers in the school lunch program of one of the city's central kitchens responsible for the daily feeding of 4,000 boys and girls in 72 schools. After receiving diplomas in general home economics and education, she studied nutrition at the Institut Supérieur d'Hygiène Alimentaire, under the direction of Madame Randoin. Miss Dutrieux is studying nutrition at the University of Alabama and is especially interested in equipment, administration, and supervision of the school lunch program.*

She is much interested in painting, music, literature, and drama and enjoys mountain climbing and skiing.

"The warm welcome I received everywhere since I landed in America," she says, "gives me the feeling of a world-wide friendship between our countries. I am lucky and proud to benefit by it . . . I would like to be worthy of it!"

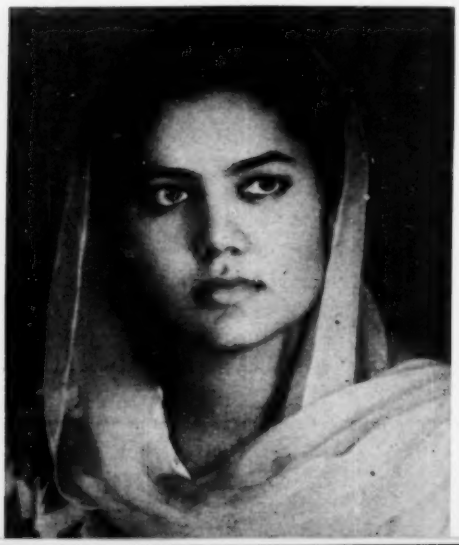
THE majority of students from other lands who come to the United States on scholarships seem to be more impressed very soon by similarities between their countrymen and people in the United States than by their differences, however different the cultural backgrounds and national customs may be. This discovery is a wonderful basis for the international understanding and good will that are important aims of international scholarship programs.

The eight women from Australia, Denmark, Finland, France, Greece, Norway, Pakistan, and the Philippines who are this year studying home economics in U.S. colleges and universities in AHEA's international scholarship and fellowship program make a total of 76 women from 32 countries who since 1930 have been enabled not only to increase their technical knowledge of the field but to acquire understanding of the people and customs of the United States and to add to our understanding of their countrymen and customs.

The Institute of International Education cooperates with the AHEA in the selection of those granted the Association's international awards and in administrative matters.

The AHEA's scholarship program is made possible by annual contributions to the Association and co-operation of colleges and universities throughout

(Left) **Theodora Tyrna** *of Greece is the AHEA's first student at Berea College.*
(Center) **Razia Shah** *of Pakistan is studying this year at Kansas State College.*
(Right) **Marjorie Martin** *of Australia is happy to be at the University of Illinois.*



Nations' Similarities

Marion H. Steele

Miss Steele, managing editor of the *Journal*, serves as secretary of the AHEA's international committee and of the subcommittee on international scholarship and fellowship awards.

Lidde Hansen *of Denmark is pleased to have lived in Purdue University's Phi Mu Sorority House.*

the United States that are well qualified to meet the especial needs of those granted AHEA awards.

Odette Marie-Thérèse Dutrieux of Paris, France, whose photograph appears on the opposite page, is the 1952-53 Helen W. Atwater fellow.

Theodora Tyrna of Thessaloniki, Greece, received a diploma in 1947 from Anatolia College at Thessaloniki after a three-year course. She then entered the medical school of the University of Thessaloniki, but the necessity of going to work two years later forced her to discontinue her studies. She worked in a nursery school for 25 children operated by the Alumni Association of her college and, in taking part in the restoration of a village, helped families to begin home life again. She thus became deeply interested in helping to improve the welfare of children. At Berea College she is studying child development and welfare and working in the nursery school. When she returns to Greece she wants to help with problems of children.

"While in the United States," she says, "I have learned different customs with little difficulty in adjusting to them; but 'dating' seems to be still 'Greek' to me."

Razia Sultana Shah of Karachi is the first girl from Pakistan to receive an AHEA award. Graduated in June 1952 from the Central Government College for Women in Karachi, she is now studying for a master's degree at Kansas State College, where she is majoring in child welfare. Upon her return to Pakistan she expects to teach in one of the two home economics colleges that have been established there with assistance from the Ford Foundation.

Among the vast differences in customs she says she has noted between the East and West, freedom between the sexes in the United States is the most striking. Made furious soon after her arrival in

(Left) **Else Flaatten** *of Norway is AHEA's first student at the University of Minnesota.*
(Center) **Lucia San Agustin** *of the Philippines is at the Pennsylvania State College.*
(Right) **Terttu Lumme** *of Finland is AHEA's first student at Oklahoma A&M College.*

New York when a young man she met asked her if she had a boy friend back home, she simply laughed when the same question was asked her that same evening in a cafeteria by the manager, who, realizing that she was far from her homeland, stopped at her table to make friendly conversation.

Marjorie Hope Martin of Collaroy, Sydney, N.S.W., Australia, is AHEA's Phi Upsilon Omicron international scholarship student at the University of Illinois. A graduate of Sydney University, she also completed a year's postgraduate study in nutrition. For the last five years she has been a lecturer at Sydney Teachers' College and associated with the training of home economics teachers in New South Wales. By her study and observation in the United States this year she hopes to contribute to the needed expansion of home economics in her homeland through her instruction of students who will be the country's future homemakers.

She is taking courses in foods and nutrition and observing in various areas of home economics and in home economics education.

Her first and lasting impression of the United States, she says, "was and will be that of outstanding kindliness, courtesy, and abundant action. . . . I have not found anything alien here to the ideals and practices of my own Australian way of life. . . . My impressions confirm the view that our peoples are of one kind, and the more we know of each other the better for each of us."

Else Flaatten of Oslo, Norway, is a graduate of the State College of Home Economics in Stabbek. Her experience as an elementary school teacher and more recently as a substitute teacher at her Alma Mater convinced her that both children and adults need education in home economics. With the expectation of continuing her college teaching she is this year trying at the University of Minnesota to get an over-all view of university training in home economics in the United States. During the last quarter she expects to observe teaching methods used in high schools. This year in the United States has convinced her, she says, that "human beings are alike but, oh, so different" and that customs in the United States "*may be* as good as our own."

Lucia San Agustin of Manila, Philippines, is a graduate of the University of the Philippines. A teacher in elementary and secondary schools for eight years, she was made assistant supervisor of secondary home economics for the Division of City Schools in Manila in 1947. In August 1951 she was promoted to her present national post of home economics supervisor in the Bureau of Public Schools. This year she is on study leave to work for a master's degree in home economics education at the Pennsylvania State College. "My training in the United States," she says, "will help me to be better prepared to help promote teacher betterment, to evaluate and improve school practices, and work for a more effective home economics program." Since American customs are well known in the Philippines she had no difficulty in adjusting to the "American way of life." She has, however, been interested in the American way of walking very fast and the fact that people in the United States seem to be always in a hurry.

Terttu Ainikki Lumme of Helsinki, Finland, is the AHEA's 1952-53 Omicron Nu international scholarship student at Oklahoma A & M College. A graduate of the Home Economics Teachers College in Helsinki, she has been a home economics teacher in the College for Teachers and Graduate Education at Jyväskyla. Her study of home economics education this year includes courses in educational methods, consumer education, and demonstration. She hopes to teach consumer education on her return to Finland, and her work in educational methods is giving her a broader view of student centered teaching. Although some "western" customs and cowboy clothes at first gave her quite a shock, she says she soon realized that "there are far more similarities in people than differences. I have observed that most Americans are in a great hurry most of the time. . . . I have found, to my amusement, that when someone greeted me with 'Hello! How are you?' and I started to tell her how I was, she had gone."

Lidde Marie Schwerdtfeger Hansen of Copenhagen, Denmark, is on leave from her position as home economics teacher at her Alma Mater, Suhr's College of Home Economics in Copenhagen. Her classes at Purdue University include home economics education, foods and nutrition, home management, and college teaching. "I am sure the knowledge I get this year will improve my own teaching," she says, "and I hope to be able to give my colleagues the right idea of American home economics education, which is taught on a broader basis than that we teach. We emphasize the practical work in the home, but we need to pay more attention to family life and to give our students more individual teaching.

"Kindness, hospitality, and interest in foreign countries and their customs," she says, "are the three things which will characterize my idea of Americans."

Human Utilization of Ascorbic Acid: A Review of Publications[1]

Jessie Whitacre

Dr. Whitacre is head of the department of rural home research in the Agricultural Experiment Station, Texas Agricultural and Mechanical College System.

A PRELIMINARY must for every piece of research work is a critical review of publications along the line of the proposed study. Thus the worker determines whether there are gaps in current information which his inquiry will help to fill. When a great deal of work has been done on a given subject, a summary and evaluation of it should be useful to teachers and others concerned with that subject matter as well as to researchers. Such considerations have prompted the preparation of this article.

The material has been adapted from a section of the statement of a Texas Agricultural Experiment Station project entitled "Human Utilization of Ascorbic Acid from Vegetable Foods in Relation to Age and Body Size and to Environmental Temperature." This state project is a contributing one to the Southern Regional Project S-15, "Assessment of Nutritional Status of Humans," under Subproject I entitled "Nutritional Requirements and Utilization."

Food Sources versus the Synthetic Vitamin

Several workers have studied the utilization by human subjects of ascorbic acid supplied by certain foods in comparison with the synthetic preparation of the vitamin. Such studies include grapefruit (*12*), guava juice (*13*), orange juice (*14, 22*), orange sections (*22*), papayas (*13*), red raspberries (*21*), strawberries, fresh (*22*) and frozen (*11*), raw cabbage (*5*), raw cauliflower (*22*), baked Irish potato (*4*), "pot liquor," the liquid poured off turnip greens and cabbage after 2 hours' cooking (*17*), mustard greens (*15*), and home canned tomato juice (*5*). In some studies the comparison was based on level of ascorbic acid in the plasma or serum (*11, 15, 17, 22*); in others, on 24-hour urinary excretion, with data also on plasma levels on one day in each experimental period (*4, 5, 12, 13, 14, 21*).

Two studies (*17, 22*) were focused on the rate of rise of the plasma ascorbic acid level. Keller and Minot (*17*), with human subjects whose blood serum ascorbic acid had been reduced by a diet deficient in this vitamin, observed that the addition of "pot liquor" to the diet was associated with approximately the same rate of increase of serum ascorbic acid as when the pure vitamin was given in amount equivalent to that in the "pot liquor." Todhunter, Robbins, and McIntosh (*22*) found the maximum increase for synthetic ascorbic acid, orange juice, and orange sections at 1½ hours after ingestion, for strawberries at 2 hours, and for raw cauliflower at 2½ hours with return to fasting level in 3 to 4 hours. With intravenous administration of synthetic ascorbic acid, Hawley, Stephens, and Anderson (*14*) found twice as much ascorbic acid excreted as when the vitamin was taken by mouth.

It seems that equivalence between the food source and the crystalline form of ascorbic acid has been satisfactorily demonstrated in only 2 of the studies cited above. These 2 studies are the second series of Hartzler's experiments (*13*) and in Hollinger's experiments (*15*) for *some, but not other,* subjects. Clayton concluded that ascorbic acid from baked Irish potato (*4*) and from raw cabbage and tomato juice (*5*) was as available as that from the synthetic vitamin. However, her subjects had lower excretion and lowered blood value on the foods than on the synthetic vitamin. Other authors noted that utilization of food and crystalline ascorbic acid was "approximately the same" (*12, 17*), "similar" (*21*), "resulted in similar urinary excretion curves" (*14*), "comparable" (within the 3½-hour experimental period) when dose of crystalline vitamin was equal in amount to *reduced* ascorbic acid in the berries but less from berries when crystalline dose equalled the *total*

[1]Published with the approval of the director of the Texas Agricultural Experiment Station as technical article 1673.

amount in berries (*11*), and that increase of plasma ascorbic acid within the 4 hours of the experimental period was not the same for each subject but there was always the same trend (*22*).

Data are not given by Keller and Minot (*17*) for their experiments with human subjects. In each of the other experiments the same absolute amount of the vitamin was ingested by all subjects. This procedure has given results which emphasize the finding in other studies (*1, 3, 7, 20*) that a relationship exists between body size and ascorbic acid requirement. However, the relationship is not completely defined.

These previous studies, although leaving a great gap in our precise knowledge concerning the utilization of ascorbic acid from food sources, demonstrate that it is feasible to use crystalline ascorbic acid as a standard for assessing the value of foods as a source of the vitamin.

Intake versus Plasma Level

Several studies have been concerned with the quantitative relation of intake to the plasma level of ascorbic acid. When supplementing a basal diet low in ascorbic acid with 4 selected increments of the vitamin, Dodds and MacLeod (*7*) found the plasma values of all 12 of their subjects to be decreasing or stabilized on an intake of 32 to 35 mg; on 57 to 60 mg, there was a persistent small surplus for 11 subjects; on 82 to 85 mg intake, plasma values reached a maximum for 8 subjects; on 107 to 110 mg, 4 subjects were still increasing their plasma values. In a study with 24 subjects, each on 3 levels of intake, Dodds, Price, and MacLeod (*9*) found 50 mg daily not adequate for maintenance, 75 mg adequate, and 100 mg produced increased excretion. In a statistical analysis of data obtained in 3 dietary surveys (2 among rural white families in 2 counties of North Carolina, one among Indians living in 4 villages near Mexico City) Putnam, Milam, Anderson, Darby, and Mead (*18*) found a significant association between ascorbic acid intake as measured by a 7-day diet record and blood content determined by analysis. They say "higher blood levels on the average accompanied higher intakes and vice versa; higher intakes were likely to be found among persons with higher blood content and vice versa."

Intake versus Excretion

Todhunter and Robbins (*20*) studying 3 subjects found the requirement to maintain saturation to be for one of them a daily intake of 60 mg, for another 70 mg, and for the third, more than 90 mg. Belser, Hauck, and Storvick (*1*) tried intakes of ascorbic acid at 13 levels ranging from 10 to 210 mg. None of their 7 subjects received fewer than 5 nor more than 8 levels, but all subjects received the 210-mg level. On the diet containing 210 mg, excretion of ascorbic acid after the additional test dose of 400 mg was not over 249 mg for 2 subjects; not less than 240 mg for 2 others. For 4 of the subjects, there was a fairly regular steplike increase in excretion with increasing intake until a value characteristic of saturation was reached, while for each of 2 others, excretions varied notably on a constant intake.

Thus, whether plasma level or excretion of the vitamin was used as criterion, persons serving as subjects have differed in their response to ascorbic acid in the experimental diet.

Intake, as mg/kg Body Weight versus Plasma Level

Bryan, Turner, Huenemann, and Lotwin (*3*) determined 65 correlations between plasma ascorbic acid value and intake in the customary diet of 56 persons, 12 to 42 years of age. The daily diet was weighed for a week by 36 of the subjects, measured by 20 of them. Analysis was made of over 500 food preparations simulating those eaten, to aid in estimating the ascorbic acid value of the diets. These workers found that "plasma concentration increases in more or less linear fashion with increasing dietary intake until the latter reaches a value in the neighborhood of 1.7 to 1.9 mg/kg and plasma approximates 1.0 mg/100 ml. Further rise in intake has much less effect on plasma level."

Findings of Bryan *et al.* are in general agreement with other studies cited on intake versus plasma level when the former is expressed on the basis of mg/kg of body weight. Belser *et al.* (*1*) reported the amount of ascorbic acid to maintain saturation to range from 1.0 to 1.7 mg/kg of body weight. Dodds and MacLeod (*7*) stated that an intake of 1 mg/kg increased plasma value for 12 subjects and produced saturation for 3 of them. Corresponding data by Todhunter and Robbins (*20*) are 1.6, 1.7, and more than 1.6 mg/kg for their 3 subjects, respectively.

Individual Variation

Variation between and within individuals has been observed by several workers. Dodds and MacLeod (*7*) pointed out that the amplitude of fluctuations and time intervals between successive high and low values tended to be quite regular

and to a degree characteristic of the individual. Hawley *et al.* (*14*) noted considerable variability in urinary response to repeated test doses of orange juice, both during and after the saturation period of 8 days. Clayton and Folsom (*4*) mentioned the consistently higher excretion by a girl of 5 feet, 4 inches weighing 149 pounds than by any of 3 boys 5 feet, 11 inches to 6 feet, 2 inches when on the same intake. Studies of Todhunter and Fatzer (*21*) and of Belser *et al.* (*1*) likewise showed variation between and within individuals. Hollinger (*15*) found that for some of her subjects mustard greens were as good a source of ascorbic acid as the crystalline vitamin, but for others not so good. She also observed that at all times small subjects maintained higher plasma values than did larger persons.

Adjustment Time

Previous work also brings out the necessity of allowing ample time for adjustment to a given level of intake. Bryan *et al.* (*3*) considered a person's "equilibrium" with his diet to be a prerequisite for determination of correlation between intake and plasma ascorbic acid. Hartzler (*13*) observed that individual variation was much less after the first 2 weeks on experimental intake. In a series of 3 successive 6-day periods used by Todhunter and Robbins (*20*) there was for each subject closer agreement for plasma ascorbic acid values on the 11th and 12th days and again, with similar values, on the 17th and 18th days than on the 5th and 6th days. Dodds *et al.* (*9*) found 14 days, but not 12, to be a sufficiently long adjustment period. Hollinger (*15*) found experimental periods of 14, 15, and 21 days satisfactory.

Environmental Temperature versus Utilization

Interpretations of data respecting effect of season upon utilization of ascorbic acid differ. Belser *et al.* (*1*) found values for the same subject which indicate a greater requirement with increase of environmental temperature—182 mg excreted for August 5 to 11 (mean temperature 77°F) and 231 mg for September 11 to 17 (55°F). Among the white families in North Carolina (*10, 18*) mean plasma levels were higher in summer and fall than in winter and spring, especially for children under 15 years. Dodds *et al.* (*9*) concluded that season had no effect—summer temperature 78°F, winter 58°F. However, their calculations were made with the mean values for all experimental intakes—50, 75, and 100 mg/day, and no one subject was studied in both seasons.

Other Factors versus Utilization

Both Bryan *et al.* (*3*) and Belser *et al.* (1) noted an agreement between basal metabolism and plasma ascorbic acid values. The latter workers said that the behavior of one subject suggested that exercise increased the ascorbic acid requirement. Hartzler (*13*) noted that menstruation was associated with a lower excretion of ascorbic acid and the relationship was more pronounced for some women than others. Todhunter *et al.* (*22*) suggested that the fiber of cauliflower may have caused delay in rise of plasma ascorbic acid. Putnam *et al.* (*10, 18*) mentioned both age and weight as factors bearing upon the higher plasma levels of children (0.76 to 0.87 mg/100 ml) than of adults (0.43 to 0.59 mg/100 ml).

Bearing on Laboratory Procedure

Hollinger and Attaya (*16*) found that, in most instances, fasting plasma levels were less than for whole blood and they observed that whole blood has the advantage of including the white cells which Crandon, Lund, and Dill (*6*) found retained appreciable ascorbic acid value for a considerable time after the vitamin disappeared from the plasma. Hollinger and Attaya found no level of plasma ascorbic acid which is consistently higher than those of whole blood and that random variabilities of plasma and whole blood are very similar. They regard urinary excretion as a poor indication of ascorbic acid status except to indicate saturation.

In 1944, Dodds and MacLeod (*7*) reported weekly averages of plasma ascorbic acid to give a better reflection of vitamin status than a single determination. In 1950, Dodds *et al.* (*9*), on the basis of statistical analysis of plasma values from several studies at the University of Tennessee, concluded that 2 consecutive daily blood values are sufficient for indicating response to intake. Dodds, MacLeod, and Carr (*8*) have given caution on the importance of guarding against exposure to light of samples of blood serum and urine which are being analyzed for reduced ascorbic acid. Dodds *et al.* (*9*) found retention close to 1 mg/kg of body weight, whether measured by reduced or total ascorbic acid. Bryan *et al.* (*2*) emphasize the necessity to know the ascorbic acid values of foods *as eaten* when estimating intake of the vitamin.

Bearing on Further Research

Youmans (*23*) points out that a deficiency of ascorbic acid may be a factor interfering with hemoglobin formation. Tisdall and Jolliffe (*19*)

mention not only the same relationship but also the association of ascorbic acid deficiency with failure in maturation of the erythrocytes, with impaired metabolism of tyrosine and phenylalanine, and with increase in respiratory rate. These observations suggest that it is desirable to have concurrent observations on hemoglobin levels and basal metabolism of subjects in studies on utilization of ascorbic acid. A study of interrelationships of ascorbic acid utilization and amino acids in the diet would be in order.

Some Gaps to Be Filled

Since the majority of the subjects in the studies cited were young adults, other age groups need to be studied. Sufficiently long experimental periods need to be employed. The same subjects should be studied to determine seasonal influence on response to ascorbic acid in the diet.

The list of foods studied for human utilization of ascorbic acid needs great expansion, especially for those rich in this vitamin and which are popular in the southern diet, such as melons, strawberries, greens of several kinds, cabbage prepared in different ways, and edible cowpeas. For those foods and for citrus fruits and tomatoes more information is needed on individual variations in utilization, with inquiry as to the reasons for the variations. Special attention should be directed to the influence of food fiber content on utilization of ascorbic acid.

Filling in the gaps which are disclosed by a survey of previous work will contribute to a more precise knowledge of human utilization of ascorbic acid. Findings will also provide a better basis for evaluating individual foods and for making dietary recommendations for this vitamin.

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Home Economics in Television

Ellen Pennell

Miss Pennell is an assistant professor in technical journalism at Iowa State College. In this article she discusses some of the reasons why home economics is not doing itself justice on television. Her introduction to the studio team should give all first-timers on television programs a feeling of confidence in the presentation of their program.

HOME economics has been on television since the early hours of research long before the TV set was even on the market. In those very first experiments home economics naturally came "into the picture" since supposedly it had many subjects and talents ready-made for television.

Some of these first requirements were:

1. Tangible subjects with viewer appeal for dramatic presentation—foods, fashions, home planning and equipment, and all subjects in that area
2. Technicians trained to present these commodities—demonstrators, script writers
3. A high degree of success in all other media such as newspapers, magazine publicity, and radio
4. A demand on the part of manufacturers and educators working in this field to present their product and information in visual journalism

Above all, home economics covered all subjects nearest the heart of every American home and offered service that helped make that home healthier and happier. Thus a potential audience was eagerly awaiting the advent of TV—and home economics on TV.

And now, several years later, what is the standing of the all-home economics programs on television? Here's warning! It is not yet a happy-ending story.

Facts, figures, and authorities sadly reveal that home economics is no TV star. Frankly, viewer response is rapidly relegating it to spot commercials rather than complete programs. And viewers don't like too many commercials!

Viewers' Comments

Just what has happened to the demand for home programs since they have become visual? Ask a group of viewers, and they will readily point up their disapproval.

"There's too much hard home work in most of the programs," said one viewer. "Why should I take time out to rest from housework, snap on TV for a few minutes' relaxation only to have some woman take 30 minutes to tell me how to clean a refrigerator!"

"Too many long demonstrations with too few peak points or new ideas; picture becomes cluttered, and they never finish on time," said another.

Some performers have had very little homemaking experience and just teach-teach-teach. "I get so nervous I'd like to walk in and help them. So many speak to us not as equals but in a singsong voice as if they were persuading children to be good."

Other comments indicated other weaknesses:

Frequently the hostess lacks sincerity. With a forced smile she talks *at* the viewers not *to* them, and at times becomes preoccupied with off-camera activities in the studio.

Cards, charts, and maps are poorly lettered and are not easily read. Some participants don't use them gracefully.

Why so many food demonstrations? Isn't there some other way to put across the home subject?

Something simple yet diverting from home problems seems to be what most women want.

These criticisms may be a shock to those who have been producing television programs with a certain degree of success. It would be quite simple to discount these comments by concluding that these viewers were the former "soap opera fans"! But further analysis will not permit such an easy escape. These comments came from viewers of programs from both commercial and educational stations.

Home Service Shows

Such comments also bear out the opinions of network executives who have sought to popularize home service shows. They, too, have found these shows limited in interest for most purposes. For best results they inject a bit of home show into their big entertainment features.

"Our surveys indicate that home service is much more acceptable in small portions," reported one businessman who had been one of the first to seek out the home program for presenting his client's product.

"Until some one comes up with a good program that entertains and informs enough to attract and hold the viewer's attention, home subjects will have to be a small portion feature in our shows."

It is some comfort to recall that this is not only a problem of home economists and educational stations. Viewers are just as critical of the purely entertainment programs, as several once top favorites are only too sadly aware.

Anyone who has followed television realizes that the solution to this problem is not simple but it can be achieved. The homemaker is a good critic, and her opinion can help us build well-balanced programs. As we know from experience in other media, home economics has material to present that can "stand up" to the appraisal of this discerning homemaker audience. The trick is to discover and to use the elements of successful television presentation.

Successful Programs

Interestingly enough, some of the favorite programs are educational features. One such favorite is "The Nature of Things," produced by Roy K. Marshall of Franklin Institute of Philadelphia and carried by the National Broadcasting Company.

According to one critic:

> This is a program for every member of the family. Each time Dr. Marshall teaches one scientific fact. No matter how difficult or unknown the subject, he makes it seem simple. He illustrates each step clearly, uses simple language, makes it so interesting it is entertaining. And Dr. Marshall is so friendly and sincere he makes us feel he's enjoyed being in our home.

Another choice program is "Meet the Press," a presentation of controversial issues of the day in which a prominent person is "put on the spot" by newspaper representatives.

This program brings to the audience important people who go through a brisk half hour of rapid-fire questions and answers that present both sides of a timely subject. Personalities, technique of presentation, and subject are all equally fascinating to the viewer.

Another educational favorite is the audience participation program. This is employed for the better children's programs. The teach-appeal to children through presentation and appealing subjects is good. These programs automatically carry continuity since they must give "exciting assignments" for the next day and thus have their little fans ready and waiting. One good teacher of preschoolers reserves time for a visit with mother. This is made even more enjoyable since the teacher announces that she will play a special marching piece on the organ while the child brings her mother.

Audience participation programs have been successful with women viewers as well. One outstanding experiment was a packaged program (done on film) where homemakers were taught to make a dress. There were 3,000 participants. Every step from fitting the pattern to sewing on the final button was given. The last feature of the series was a style show where respondents modeled their garments.

Study of these favorite programs will reveal the following features mentioned by the critics:

1. Shorter, simpler programs
2. Participants who know their subject matter so well that they are convincing and not easily distracted
3. Friendly, sincere, interested-in-you manner on part of hostess and guest performer
4. Famous personalities
5. Important current topics
6. Information on products (foods or garden tips) that are in season
7. Proper dress for type of program (especially for food programs)
8. Lively, step-along tempo to entire program
9. Audience participation
10. Continuity from one program to the next
11. Interesting openings and closings

Improvement of Home Economics Programs

With these facts before us, what next? There seems to be only one answer—meet the challenge television offers to our profession.

The first thing to do is to get acquainted with this new medium. Really watch programs, watch them until you become selective. Analyze why you like some and dislike others. And do your best to place yourself into the reactions of the viewing homemaker.

An understanding of what makes a successful television program from the homemaker's point of view is certainly the most important step toward the ability to produce or to participate in a good home economics program yourself. Next, and some people may feel equally important, is an understanding of the technical requirements of television to the extent that you can appear at ease in the

These three dairy maids sang, danced, and pantomimed the theme of a June Dairy Month TV program.

studio. The fascinating activities of the studio are completely nonexistent for the audience and must appear to be so for participants in the program. This apparent oblivion requires both self-control and considerable familiarity with studio activities. Some of this even the neophyte can acquire very easily.

Make it a point to visit a studio the next time you are in a city where a home program is in session.

On many programs, you will find good home economists working on ideas, selecting properties, writing scripts, and producing programs. An understanding of their duties and those of the studio staff will help you to work with them more confidently when you are invited to appear on a television program.

Studio Personnel

When you set pen to script you start an amazing chain of action in the studio. The simplest program—a one-camera, one-person feature—involves 12 different studio operations. A two-camera program tips off the same series of functions but increases the personnel. By the time your program is ready for rehearsal you may have a producer, director, technical director, floor director, cameramen, "mike" operator, audio man, video control man, announcer, lighting technicians, projection men, transmitter engineer, and property men working with you—in addition to your staff and artists who prepared "visuals" and painted scenes.

Eleven engineers are required to do a two-camera program. The cameras have to be "fired" or warmed up before rehearsal and program. This takes one hour. They have to be thoroughly checked before rehearsal and that takes men, time, and money. Every hour taken for rehearsal means that much wear on tubes. A camera tube depreciates at a rate of approximately $3 an hour. This explains why the studio has to set rehearsal time; also why rehearsal time cannot be changed. Your program must fit into the total rehearsal and program schedule. Once this rehearsal time is set it cannot be changed. This time is limited; therefore, all program plans and preparations should be made before going into rehearsal. Now let's see what all those technicians do toward perfecting a program.

Producer. The producer in any TV studio coordinates every phase of a given program. At all stations every program has its own producer.

What does a producer do? A summary of the duties of a producer of a typical home economics program at a land-grant college may help you to understand procedures better. The producer:

1. Serves as liaison person between station, home economics resident staff, extension staff, information service, and other special groups such as out-of-town or state and national guests
2. Schedules the programs for the year
3. Helps you develop your program

She clears rehearsal time and notifies performers; helps outline program and advises on script writing; consults on costumes and properties; "takes your order" for visuals, slides, and films and follows through on production; assists in selecting talent, models, or any participants you may need to complete your program if you need help; checks all films, songs, and recordings to see whether they are "cleared" for use on television; attends all studio rehearsals—"dry run" and before the camera; supervises the station kitchen; handles all purchases of properties and foods for program; is hostess for all home programs; routes viewers' requests and questions to the authorities on the subjects; works closely with the director in staging the program and adhering to station policies.

Director. Each program is assigned a director who devotes much of his time to your program. His duties are outlined below.

1. Goes over your script with the producer in order to achieve the best technical presentation

   He works with the producer in planning suitable sets which are within the limits of studio facilities; advises on visual devices suitable for television and the particular program; advises on movements and arrangement of guests on

the set; knows station policies, arranges rehearsal times, and notifies producer of rehearsal schedule.

2. Checks all mechanical devices with the technical director, the property department, and lighting technicians before rehearsal time
3. Has sets and properties ready and personnel at their stations when your program goes in for rehearsal (As more "live" programs are developed at the station this becomes increasingly difficult.)
4. Is in charge of the rehearsal and final presentation of your program

   He shows each guest what she is to do to adapt her material to television; tells you the meaning of the signals you receive from the floor director; is in the control room "calling the shots" that put your program on the air during the rehearsal and program. (The headphones you see on cameramen, the microphone operator, and floor director all bring the director's instructions for each move they make.)
5. Answers your questions about studio TV operations (if you have a question be sure to ask him.)

Floor director. The floor director is usually a student in television and is a member of the TV workshop.[1] She appears at rehearsal with earphones and takes her place between the cameras. She is your connecting link with the director, who is in the control room. The only signals you receive during your program come from the floor director. She may stand, squat, or slip between cables, cameras, and props, but she's there to help you. Her hand points to the camera which is on you. She receives her instructions from the director. She may signal a speed-up or a stretch (go slower, lengthen program to amount of time left) during the last few minutes of your time.

Cameramen. Rehearsal is important for the cameramen. It is their chance to observe your technique and timing. With the director they try one shot and another. They "take and retake" to make a simple object real, yet dramatic. As they experiment with different camera angles the director may ask you to repeat an action over and over. To support the cameramen's efforts a video operator sits in the control room and checks image quality. He adjusts the "shading" machine to make each picture sharp and clear.

Mike Operator. The microphone operator sets the mikes and changes their positions as necessary for your program. Often the microphone is suspended from the large TV "Mike-Boom." The operator stands on the platform and directs the mike to follow you as you move from place to place during the program. The microphone is suspended above your head and catches every sound from the set. The only precaution is for you to speak with head up, sometimes difficult if you are leaning over a table. Speak up and out, which is natural if you face the camera. Always avoid speaking if your back is turned for an instant to the microphone.

Audio man. Another operator whom you seldom see is the audio man. He can control the volume and pitch of your voice within limits. It is he who has command of the audio portion of the program.

Technical director. The technical director is responsible for all operating equipment and satisfactory technical presentation of all programs. It is within his jurisdiction to alter the program with the director if the program is not suitably planned for station equipment. Also he can withdraw the use of any equipment if it is not in good condition.

Lighting director. If some day you arrive at the studio and start dodging cameras and skipping cables only to be suddenly brushed by a ladder gliding past—don't jump. Just look to the house top and there's your lighting director or his assistant. They spend their time in the higher regions, slanting banks of fluorescent lights, adjusting floor lights, or angling the small spotlights.

No man has more problems than your lighting technician, and all you can do is to walk in and let him experiment. Just go about your business of presenting your best self. The lighting technician will do all he can to present you at your best.

Lights are set 30 minutes before rehearsal and are constantly adjusted for better effects during rehearsal. The lights are a part of the scheme of things, and no matter how bright or how hot you must bear with them. No program can be put on without them. They simply can't be turned off!

Property man. One of the most fascinating places in the studio is the "prop" (properties) room. Building, painting, and refinishing of furniture is always in process there. From the maze that surrounds them you're sure the prop men will never find what you want, but they always do. If it isn't in that shop they know where to find it if given ample notice. Just one word of warning. Time is required to get some things. If you know your needs, give your producer ample time to find these program props.

[1] TV workshop is a course where students assist in every phase of program production.

RESEARCH

The Gelation of Pectin in Uncooked Jam from Frozen Red Raspberries and Strawberries

Mary Akers Kramer and Gertrude Sunderlin

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THE earlicst method used for preparing jams and jellies was the hot evaporation method in which the fruit and sugar were boiled together until a point was reached at which the concentration was such that a gel would form. With the marketing of packaged pectins it became possible to make jellies with the one minute or "short boil" method. A few homemakers have used the "warm juice" method in which the sugar was stirred into the warm juice and the solution left to gel without cooking. The methods involving cooking produce jams and jellies with flavors altered by heat. The "warm juice" method produces jellies of good flavor, but which may be too soft, may crystallize, or may mold or ferment during storage. An uncooked jam of satisfactory consistency and distinctive fresh fruit flavor can be made with the storage problems solved by the use of the freezer. The first published report concerning uncooked jam appeared in 1947 from the Western Regional Research Laboratory (*1*), giving suggestions for commercial manufacture of these "fruit spreads." In an article by Kantrus (*2*), household size recipes were given for uncooked red raspberry and blackberry jams made with fresh fruit. The present study was concerned with the effects of the proportions of ingredients and certain conditions of mixing on the gelation of pectin in uncooked jams from commercially frozen red raspberries and strawberries and with the determination of satisfactory proportions and procedures for making such jams.

Procedure

Frozen red raspberries and strawberries were prepared for use in the experiments by forcing the thawed berries through the colander and roller attachment to a large electric mixer. After blending, the purée was put into pint jars, covered, and stored in a food freezer until needed.

Except where method of preparing the jam was the variant, the method used in all the experiments involved stirring the sugar into the thawed purée until dissolved, then stirring in the pectin solution. The pectin solution was liquid pectin or powdered pectin dissolved by boiling in water for one minute. Two samples were poured into 40 cc crucibles at the end of the following stirring intervals: ½ minute, 2½ minutes, and 5 minutes. After gelation during 24 hours at room temperature, the consistencies of the finished jams were determined on the penetrometer.

Other data secured for each sample included the pH, the mixing temperature, the time required for the solution of the sugar, and the percentage of sugar in the finished jam. The syneresis was determined and judges scored certain samples of the jams for acceptability, sweetness, flavor, and consistency.

In order to be able to calculate the sugar percentages it was necessary to ascertain how much sugar was packed with the frozen fruit used. In correspondence with one of the packers it was established that 1 part of sugar was used to 4 parts of fruit in the household size packages. He suggested that, because of competition and lack of specific federal standards for sugar content of frozen foods, all the frozen fruit packers used about the same amount of sugar. The sugar percentages were calculated on this basis. This information was also helpful in adjusting the recipes and was used in making suggestions for the preparation of the

uncooked jams from fresh fruits or from fruits which might be frozen at home without sugar.

The proportions used for the control jams from frozen red raspberries when testing variants were 3 twelve-ounce packages red raspberries (1,000 grams purée) and 5 cups sugar (1,000 grams) to 1 box powdered pectin (70 grams) and ¾ cup water (178 grams) or to ½ bottle liquid pectin (123 grams).

The proportions used for the control jams from frozen strawberries when testing variants were 2 twelve-ounce packages strawberries (667 grams purée) and 3⅓ cups sugar (667 grams) to 1 box powdered pectin (70 grams) and ¾ cup water (178 grams) or to ½ bottle liquid pectin (123 grams).

Variants used in the preparation of uncooked jams from frozen red raspberries included:

Five methods of mixing using powdered pectin

Four methods of mixing using liquid pectin

Three rates of stirring before pouring: slow, rapid, intermittent

Six mixing temperatures (centigrade) with powdered pectin and the same with liquid pectin: 5°, 15°, 25°, 35°, 55°, 95°

Seven proportions of sugar to fruit when using powdered pectin, and the same for a liquid pectin series: 3½, 4, 4½ 5, 5½, 6, 6½ cups for 3 twelve-ounce packages fruit

Four proportions of fruit to powdered pectin: 2, 3, 4, 5 twelve-ounce packages fruit to 1 box powdered pectin

Ten proportions of fruit to liquid pectin: 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 twelve-ounce packages fruit to 1 bottle liquid pectin

Three additions of acid for both liquid and powdered pectin series: 7½ cc lemon juice, 15 cc lemon juice, 4.3 g ACM (ascorbic-citric mixture) to 3 twelve-ounce packages fruit

Four brands of frozen red raspberries with powdered and with liquid pectin

Three brands of powdered pectin and 1 brand of liquid pectin

Three intervals of stirring before pouring: ½ minute, 2½ minutes, 5 minutes

Variants used in the preparation of uncooked jam from frozen strawberries included:

Three proportions of sugar to fruit when using liquid pectin: 2¾, 3, 3⅓ cups for 2 twelve-ounce packages fruit

Three proportions of sugar to fruit when using liquid pectin and added acid: 2¾, 3, 3⅓ cups for 2 twelve-ounce packages fruit and 15 cc lemon juice

Four proportions of fruit to powdered pectin: 1⅔, 1½, 2, 3 twelve-ounce packages fruit to 1 box powdered pectin

Three proportions of fruit to liquid pectin: 2, 2½, 3 twelve-ounce packages fruit to ½ bottle liquid pectin

Three proportions of fruit to liquid pectin and added acid: 2, 2½, 3 twelve-ounce packages fruit to ½ bottle liquid pectin and 15 cc lemon juice

Three brands of fruit with liquid pectin

Three intervals of stirring before pouring: ½ minute, 2½ minutes, 5 minutes

Results

There seemed to be a difference of opinion among the judges on what constituted desirable consistency—some preferring very soft jams and others liking jams which would hold their shape but yet spread easily. It was noted that even though the jams held their shape, they softened considerably when stirred through. However, the jams spread easily without stirring. Jams which were accepted as of satisfactory consistencies gave readings on the penetrometer of 25.1 millimeters or less, usually about 23 millimeters. These jams were stiff enough to hold their shape when turned out of the containers.

Red raspberries. Two methods for preparing the jams from both liquid and powdered pectin were found to be satisfactory. The simplest of these methods and therefore the one recommended for household use involved merely dissolving the sugar in the puréed fruit and stirring in the pectin solution. Variants used and those which produced acceptable uncooked jams are enumerated in table 1. The rate of stirring the jams was not found to be important, but it was necessary to combine the ingredients thoroughly.

When temperature was the variant, the jams prepared at 35°C or below were considered uncooked; the 55°C jam was considered semicooked and the 95°C jam cooked. The uncooked jams were characterized by a bright red color, a natural fresh fruit flavor, a satisfactory consistency, and some syneresis. The 55°C jams were only slightly darker with little noticeable flavor change. The 95°C jams more nearly resembled the products of the hot evaporation method. The color was markedly darker than in the uncooked samples, the consistency was firmer, the flavor was altered to an undesirable extent, and the amount of syneresis was less. There was a unique separation of juice and seeds, as well as an excessive amount of

foam. The pulp and seeds rose to the top, leaving a layer of juice at the bottom which formed a clear jelly. This undesirable separation may have been due to the slower rate of setting at the higher temperature, which allowed the lighter material to rise. The penetrometer readings of the temperature samples made with both liquid and powdered pectin and stirred 2½ minutes were analyzed statistically. No significant difference was found between the readings of the jams prepared at 35°C or below. However, between this group and those samples heated to 55°C and 95°C a significant difference was found. When the jams were heated to 55°C or 95°C they were stiffer than were the 35°C samples. The similarity between the samples prepared at 35°C or lower was of particular interest because it was at those temperatures that the uncooked jams were to be made.

TABLE 1

Variants used and those which produced acceptable uncooked jams from frozen red raspberries

VARIANT	TESTS	CONSIDERED SUCCESSFUL	PENETROMETER READINGS FOR SUCCESSFUL JAMS*
			millimeters
Rate of stirring	Slow, rapid, intermittent	All	22.6 to 25.1
Mixing temperature (Centigrade)	5°, 15°, 25°, 35°, 55°, 95°	5°, 15°, 25°, 35°	22.3 to 23.7
Proportion of sugar to fruit when using powdered pectin	3½, 4, 4½, 5, 5½, 6, 6½ cups for 3 twelve-ounce packages fruit	4, 4½, 5, 5½, 6, 6½ cups	21.3 to 24.5
Proportion of sugar to fruit when using liquid pectin	3½, 4, 4½, 5, 5½, 6, 6½ cups for 3 twelve-ounce packages fruit	4½, 5, 5½, 6, 6½ cups	20.8 to 23.5
Proportion of fruit to powdered pectin	2, 3, 4, 5 twelve-ounce packages fruit to 1 box powdered pectin	All	21.9 to 24.1
Proportion of fruit to liquid pectin	4, 5, 6, 7, 8, 9, 10, 11, 12, 13 twelve-ounce packages fruit to 1 bottle liquid pectin	All	20.9 to 24.1
Addition of acid	0, 7.5 cc lemon juice, 15 cc lemon juice, 4.3 g ACM for 3 twelve-ounce packages fruit	All	20.2 to 24.2
Brands of fruit and pectin	4 brands of fruit, 3 brands powdered pectin, 1 brand liquid pectin	All	21.9 to 24.2
Interval of stirring before pouring	½ minute, 2½ minutes, 5 minutes	2½ minutes, 5 minutes	20.2 to 25.1

* Penetrometer readings were taken from samples poured after 2½ minutes of stirring.

In the series of jams which was made with powdered pectin and with varying amounts of sugar (3½ cups to 6½ cups of sugar for 1,000 grams or 3 twelve-ounce packages of fruit), the percentages of sugar varied between 47 per cent and 60 per cent. There was no gelation when 47 per cent sugar (3½ cups) was used, but satisfactory gels were formed with sugar from 50 per cent to 60 per cent (4 to 6½ cups). Within this range there was no consistent trend for increased or decreased stiffness due to varying the percentage of sugar. It is a well-known principle of jelly making that the higher the amount of sugar in the finished product the stiffer the consistency of the jelly, but that principle was not demonstrated here. However, there was some evidence that the jams made with liquid pectin were stiffer with the higher sugar concentrations. Jams made with liquid pectin ranged in sugar content between 49 per cent and 62 per cent, representing 3½ cups to 6½ cups of sugar for 3 twelve-ounce packages of fruit. Satisfactory jams were made within a sugar range of 54 per cent to 62 per cent (4½ to 6½ cups). The judges were very inconsistent in scoring sweetness in these jams in which sugar was varied, indicating that they did not detect much difference in sweetness due to the sugar variations used.

In the two series where proportions of liquid and of powdered pectin were varied, the samples with more pectin were stiffer than were those with less. Within the wide ranges noted in table 1, all the jams were satisfactory. Jams of satisfactory consistency were made using either powdered or liquid pectin. A difference was noted between the color of the jams made with liquid and with powdered pectin. The powdered pectin was colorless in solution and gave a lighter and more attractive jam. The amber-colored liquid pectin darkened the jams somewhat. The jams from powdered pectin were slightly more tart than were the ones from the liquid pectin because the powdered pectin contained more acid.

Even though the pH of the red raspberry purée was approximately 3.0, which is satisfactory for pectin gels, the acid series was an attempt to see if acid improved the jams either in consistency or flavor. The powdered pectin jams with acid added seemed to be very little different from the jams without the acid; however, the jams made with added acid when liquid pectin was used were slightly stiffer. The judges were not con-

sistent in preferences shown for jams with or without the added acid.

Satisfactory jams were made using both powdered and liquid pectin and the four available commercial brands of fruit. The judges did not detect any differences in flavor. Besides the brand of powdered pectin used throughout most of the experiment, two other available brands of powdered pectin were found to produce satisfactory gels when used by packages rather than by equivalent weight.

As the jams were stirred for three different intervals after the pectin was added to the fruit-sugar solution, it was of interest to note whether or not this stirring had any marked effect upon gelation. There was no consistency in whether stiffest jams occurred at 30 seconds, 2½ minutes, or 5 minutes, although in only 10 of the 146 samples of red raspberry jam were the stiffest at 30 seconds. In an attempt to determine whether there was any connection between pH, sugar percentage, or mixing temperature and the effects of stirring, the data were analyzed with these points in mind. No relationship was evident between any of these factors and the stiffness as affected by stirring. Stirring for 2½ minutes seemed to be long enough for good gelation. Although it was unfortunate that there seemed to be irreconcilable inconsistencies in the effects of stirring on the stiffening of the gels, similar differences have been noted in the literature (3) (4).

The only characteristic of the uncooked jams that was undesirable was the appearance of syneresis when the samples were turned out onto a dish. This syneresis seemed unavoidable but was not thought to be excessive when the 50 gram sample of jam turned out on perforated tin lost no more than 8 grams liquid during a 24-hour period. For practical purposes, if the jam was stirred before serving, the liquid was redistributed. If the jam was left undisturbed after this stirring, it formed a gel which seemed only slightly softer than the original gel.

Because the jams were not sterilized and because of comparatively low sugar concentrations, storage at room temperature was not practical. Freezer storage was recommended for long periods although the refrigerator was found satisfactory for periods of 6 weeks or less. The consistency of the jams stored in the freezer did not soften during storage and a few samples became firmer. The syneresis was about the same after freezer storage as before. The judges found no detrimental effects on flavor due to freezer storage.

Strawberries. The relatively few experiments with frozen strawberries indicated a narrower range of satisfactory proportions of both sugar and pectin to fruit than with the red raspberries, as is shown in table 2. In the series of jams which was made with liquid pectin and with varying amounts of sugar (2¾ cups to 3⅓ cups of sugar for 667 grams or 2 twelve-ounce packages of fruit), the percentages of sugar varied between 49 per cent and 55 per cent. There was no gelation when 49 per cent or 52 per cent sugar (2¾ cups and 3 cups) was used, but satisfactory gels were formed with 55 per cent sugar (3⅓ cups). In the series where 15 cc lemon juice was added, less sugar was required for gelation as 52 per cent (3 cups) was satisfactory. The lowest proportion of powdered pectin to fruit producing acceptable gelation was 1 box pectin to 2 twelve-ounce packages fruit.

The pH of the strawberry jam purée was about 3.3. A series of jams made with lemon juice added showed that the acid produced slightly firmer jams.

TABLE 2

Variants used and variants which produced acceptable uncooked jams from frozen strawberries

VARIANT	TESTS	CONSIDERED SUCCESSFUL	PENETROMETER READINGS FOR SUCCESSFUL JAMS*
			millimeters
Proportion of sugar to fruit when using liquid pectin	2¾, 3, 3⅓ cups for 2 twelve-ounce packages fruit	3⅓ cups	23.1
Proportion of sugar to fruit when using liquid pectin and added acid	2¾, 3, 3⅓ cups for 2 twelve-ounce packages fruit and 15 cc lemon juice	3, 3⅓	22.7 to 25.0
Proportion of fruit to powdered pectin	1⅘, 1½, 2, 3 twelve-ounce packages fruit to 1 box powdered pectin	1⅘, 1½, 2	20.5 to 22.9
Proportion of fruit to liquid pectin	2, 2½, 3 twelve-ounce packages fruit to ½ bottle liquid pectin	All	23.9 to 24.9
Proportion of fruit to liquid pectin and added acid	2, 2½, 3 twelve-ounce packages fruit to ½ bottle liquid pectin and 15 cc lemon juice	All	22.9 to 23.7
Brands of fruit	3 brands of frozen strawberries and liquid pectin	All	21.0 to 23.2
Intervals of stirring before pouring	½ minute, 2½ minutes, 5 minutes	2½ minutes, 5 minutes	21.0 to 25.0

* Penetrometer readings were taken from samples poured after 2½ minutes of stirring.

Summary

Uncooked jams of satisfactory consistency and distinctive fresh fruit flavors were made from frozen red raspberries and successfully subjected to freezer storage. The probability of success when uncooked red raspberry jams are made in the home is increased by the wide range of acceptability in rates of stirring, temperatures of mixing, sugar concentrations, proportions of pectin, and commercial brands of both frozen fruit and of pectin.

The relatively few experiments with frozen strawberries indicated a narrower range of satisfactory proportions than with the red raspberries, and the proportion of pectin to fruit for satisfactory gelation had to be higher.

These uncooked jams are of practical interest because of their ease of preparation, the continuous availability of frozen fruit, and their unique fresh flavor.

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JAMS WITH FRESH FRUIT FLAVOR

During the course of this investigation on "The Gelation of Pectin in Uncooked Jam from Frozen Red Raspberries and Strawberries," recipes for these jams assumed importance. These jams are of practical interest because of their ease of preparation but mainly because of their unique fresh fruit flavor.

Recipes were developed for red raspberry and for strawberry jams using both liquid and powdered pectin and commercially frozen, fresh, or home frozen fruit which had been packed without sugar. Enough work was done with commercially frozen and with fresh peaches and cherries to formulate recipes for their use. It was found necessary to add acid to the peach jams to lower the pH. The acid, incidentally, prevented the peaches from browning due to oxidation. The cherries could not easily be puréed because of the tough skins; therefore, they were ground with a food chopper.

Other fresh fruits which have been successfully used for these jams include plum, blackberry, apricot, black raspberry, grape, and cranberry.

The recipe for uncooked jam using frozen red raspberries is given here. Other recipes are available on request to the authors, Purdue University, Lafayette, Indiana.

Red Raspberry Jam

3 twelve-ounce packages frozen red raspberries
5 cups sugar
1 package powdered pectin
¾ cup water

After thawing, sieve or thoroughly mash the raspberries. Combine berries and sugar. Let stand about 20 minutes, stirring occasionally. Stir the pectin into the water, bring to boiling and boil rapidly for 1 minute, stirring constantly. Remove from stove. Add the berries and stir about 2 minutes. Pour into jelly glasses. Cover and let stand at room temperature 24 hours or until gelled. Seal with paraffin and store in a freezer. Or, the jam will keep several weeks at refrigerator temperature. This makes about 9 glasses.

To use liquid pectin for this jam, omit the powdered pectin and water and use ½ bottle of liquid pectin (½ cup). No cooking is necessary.

Two Hundred and Thirty-Three

young, active, and enthusiastic graduating seniors have been added to the AHEA membership since January 1, 1953. This means that many of our college teachers and heads of home economics departments have made a special effort to acquaint these beginners in our profession with the advantages of membership in AHEA. To these graduates we extend a cordial welcome.

Illinois leads with 53 graduating senior members; California, Indiana, Minnesota, New York, and Ohio each contributed from 15 to 25. Alabama, Arizona, Arkansas, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, North Carolina, North Dakota, Oklahoma, Rhode Island, Tennessee, Texas, Virginia, West Virginia, and Wisconsin also have graduating senior members. Some of them may be present at your state meeting this spring. Meet them and help them understand the activities of the Association.

Changes in Appearance of Women 45 to 65 Years of Age Which Affect Use of Ready-to-Wear Garments and Commercial Patterns

Margaret Harris Blair

Mrs. Blair is professor of home economics in the School of Home Economics and chairman of the division of textiles and clothing at the University of Georgia. This paper reports one part of a continuing study.

THERE are now more than 21,000,000 women in the United States 45 years of age or older. Their happiness and success in living and in their activities, in the home or out of it, contribute to the lives of their families, to the organizations or work in which they participate, and to their communities.

As older women take more and more part in activities outside of the home, economic, psychological, social, and sociological factors are involved which make it increasingly important that the appearance of these women be as attractive as possible at all times.

Certain problems related to dress seem to be causing women of this age group a great deal of annoyance and even distress. Teachers of adult classes in urban areas, home demonstration agents working with rural women, and other leaders of groups of women, as well as many individual older women themselves, are searching for solutions for problems which confront the older woman in her effort to meet today's high standards for dress and grooming. Many of these problems are concerned with the selection and use of ready-to-wear clothes of satisfactory fit, color, texture, and design and with the use of commercial patterns. But neither these women nor group leaders have authentic source material to which they may turn for help in analyzing or solving these problems.

A perusal of the aids commonly used in the solution of problems of dress revealed a dearth of material concerning problems of dress peculiar to older women. Apparently it was either assumed that their problems were the same as those of younger women or that it was not important that women continue to dress attractively as their years accumulate.

Observations of groups of older women reveal that many of them wear ill-fitting garments which were designed along uninteresting or monotonous lines for the stout woman, or which were designed for the young figure and young personality and thus may be entirely unsuited to the mature woman who is short and slight. But there seems to be no other choice except to buy such garments. Very rarely one observes an older women who is lovelier looking and radiates more grace and charm than in her younger days. What is her secret?

Interest in Older Women's Dress Problems

Evidence of universal interest and a felt need of help in solving problems of dress peculiar to older women was shown in letters from 27 states, Hawaii, and Canada which the writer received after leading papers published stories inspired by a New York radio interview when this study was getting under way. From the above mentioned observations, from the reactions of women revealed in their letters, and from the unusually high per cent of responses to the questionnaires which were sent out, there seemed to be a real need for an investigation (1) to discover what the problems really are which confront the older woman who is trying to maintain an attractive appearance, (2) to discover whether these problems are the same, with possible accentuation, as those experienced by younger women or whether they really are peculiar to older women, (3) to determine whether the difficulty lies with design and sizing of ready-to-wear garments or commercial patterns, and (4) to discover wherein lie the solutions to various related problems.

Among the questions under investigation in the present project are: If the appearance of older women is different from that of younger women, what are the changes of contour and proportion that are detrimental to appearance? Could these changes be prevented through the efforts of the individual; or if they have occurred, how can the

resulting problems be diminished? What is the relationship of weight and posture to the problem? Are there possible solutions to older women's fitting problems in the use of ready-to-wear garments which could be made through modifications in the cut of garments or patterns based on the changed figure of older women? What, if any, consideration to the changed body contour of older women are manufacturers now giving in the cut of garments? What, if any, considerations do manufacturers now give to the special design needs of this age group, except for women who are overweight? What alterations in the cut of present available ready-to-wear garments and commercial patterns could be made which would result in better fit and greater comfort and satisfaction in their use by older women?

Changes in Appearance

The phase of the study presented here deals with changes in appearance experienced by this group of women 45 to 65 years of age which affect body contour and size.

The data were drawn from returned questionnaires which were sent to a random sampling of women—551 in Georgia and 163 outside of the state, a total of 714. Of the 401 (56 per cent) returned, 361 (50.5 per cent) were used.

All names of women found in the Athens (Georgia) telephone book with whom the investigator was acquainted and who were thought by her to be within the age group of 45 to 65 years were selected. To these were added names of women thought to be in this age group from elsewhere in the state. Of the 551 questionnaires sent to Georgia women, 260 (47 per cent) were returned. Four gave no age; 26 reported ages outside the selected age group; one was otherwise unusable. Thus, 229 questionnaires could be used, 42 per cent of those sent out. The large rate of returns seems to indicate a generally felt need for information on the subject.

Of the 163 questionnaires sent to women outside of Georgia, 141 (86.6 per cent) were returned with only 9 which could not be used. One hundred and thirty-two (81 per cent) were used. The method of selecting the out-of-state names was to send a questionnaire and explanatory letter to every woman who wrote to the investigator following the above mentioned press reports. Other names were secured through the co-operation of college clothing teachers from 33 states who attended a Syracuse University summer seminar with the writer.

There was a difference in the sampling of the Georgia and out-of-state groups in that most of those outside of Georgia had manifested an interest in the study whereas the Georgia women were not selected on this basis.

The changes in appearance of older women with which the study deals are: added weight, thickened waist, double chin, heavier upper arm, sagging bust, rounding shoulders, "dowager's hump" (a pad of fat at the base of the neck in the back), legs less shapely, unattractive elbows, wrinkles, fading eyes, graying hair, and others. On the last set of questionnaires it was decided to add pale cheek bones and crapy neck.

The changes included in this first report from the project are those which might be related to fitting problems as follows: added weight, thickened waist, heavier upper arm, sagging bust, rounded shoulders, dowager's hump (see table 1).

The change most often checked was that of "thickened waist." Even though the sampling for this study was randomly made, over half of the women weighed an average of 19 to 20 pounds over ideal weight for their height and bone structure as given in the Metropolitan Life Insurance Company ideal weight tables. One hundred and twenty-three of the Georgia women (54 per cent) stated that they had added weight since age 45. There may have been others who did not recall exactly their weight as young women who also had added weight after 45. If so, this number might have been larger; but over half of this group recognized and admitted the fact that their weight had increased.

TABLE 1

Recognized physical changes after 45 years of age by women in Georgia and out of Georgia

AGE GROUP (YEARS)	LOCATION	TOTAL NUMBER OF RESPONDENTS	NUMBER OF WOMEN REPORTING PHYSICAL CHANGES INDICATED*						TOTAL NUMBER OF PROBLEMS REPORTED
			a	b	d	e	f	g	
45 to 50	Georgia	72	33	45	29	32	23	9	171
	Elsewhere†	39	14	15	9	7	9	5	59
51 to 55	Georgia	48	25	28	18	24	18	9	122
	Elsewhere	35	16	21	12	18	13	9	89
56 to 60	Georgia	76	43	53	32	43	24	12	207
	Elsewhere	34	22	26	12	15	9	9	93
61 to 65	Georgia	33	22	24	11	20	7	6	90
	Elsewhere	24	14	19	10	17	8	6	74
Totals	Georgia	229	123	150	90	119	72	36	590
	Elsewhere	132	66	81	43	57	39	29	315

* a—added weight
b—thickened waist
d—heavier upper arm
e—sagging bust
f—rounding shoulders
g—dowager's hump

† 27 other states, Canada, and Hawaii.

One hundred and fifty (65.5 per cent) stated that their waistlines had increased. The age group reporting this item most often was the 56 to 60 years group of whom 69.7 per cent admitted this figure change. Ninety women (39.3 per cent) checked heavier upper arm.

One hundred nineteen (52 per cent) reported sagging bust. If patterns and ready-to-wear garments have planned bust fullness on the scye-line and the bust of an individual is allowed to sag to a lower position where the garment is darted to curve in under the bust, a problem in fitting and trimness of appearance occurs. With present available supporting garments, it seems that this problem could be avoided unless too much fat is allowed to accumulate above the waist.

Seventy-two of the women (35.7 per cent) recognized that they had round shoulders. Some of that difficulty could have been due to faulty posture but, no doubt, since more than half of the women were overweight, some of the rounding shoulders were due to a layer of fat across the back which is observed on many older women.

Only 16 per cent (36) checked dowager's hump, although from observation this change seems to occur much more often than that. It is entirely possible that because of the position of this pad of fat, it is not seen nor recognized by everyone who has it. Since it is not found in normal young figures on which patterns are based it can cause serious fitting problems, especially when the amount of fat on this part of the body has reached large proportions.

In the out-of-state group, 50 per cent had added weight after reaching 45 years of age, 61 per cent admitted thickened waist, 43 per cent stated that their bust line had dropped, 29.5 per cent recognized that they had rounded shoulders, and 22 per cent checked dowager's hump.

Of the total group 52 per cent had gained weight after reaching 45 years of age, 64 per cent had increased their waist measure, 36 per cent had heavier upper arms, 47 per cent had sagging bust, 33 per cent had rounded shoulders, 22 per cent had dowager's hump (see table 2).

Although the Georgia sampling was almost double that of the out-of-state group and was entirely randomly selected except for the age limit, it was interesting to note how close the statistics ran. The Georgia responses, however, show a higher per cent reporting all of the figure changes except the dowager's hump than do those of the out-of-state group. Only 16 per cent of the Georgia women recognized the occurrence of the dowager's hump whereas 22 per cent of the out-of-Georgia sampling reported that change. This would seem to indicate that Georgia women have a higher per cent of these problems or that the greater per cent reported by Georgia women may indicate that more of them recognized their problems than did women in the other sampling.

TABLE 2

Comparison of reported recognition by women in the 45 to 65 age group of certain changes in body size and contour

LOCATION	TOTAL NUMBER OF RESPONDENTS	PER CENT OF WOMEN REPORTING PHYSICAL CHANGES INDICATED*					
		a	b	d	e	f	g
Georgia	229	54	65.5	39	52	35.7	16
Elsewhere†	132	50	61.4	32.5	43	29.5	22
Total	361	52	64	36	47	33.5	18

* a—added weight
b—thickened waist
d—heavier upper arm
e—sagging bust
f—rounding shoulders
g—dowager's hump

† 27 other states, Canada, and Hawaii.

The proportions on which measurements in ready-to-wear garments and commercial patterns are made are based on the body contour and proportions of young women. It is obvious then, since 231 (64 per cent) of the 361 women comprising the sample stated that their waist measure had increased and 189 (52 per cent) stated that they had gained weight, that there is a tendency in older women to allow the occurrence of increased weight and increased girth, and that these changes in body contour and proportions will present problems in the use of clothing and patterns based on proportions of the young woman.

Patterns can be bought in large sizes which allow for increased bust, waist, and hip measure, and ready-to-wear garments in large sizes allow for these same increases. But is provision made for the longer back line and back armscye needed for rounded shoulders and dowager's humps and for lower placement of full areas in the front for sagging busts? After patterns for cutting ready-to-wear garments or for home sewing are graded to larger sizes, is the ratio of bust measurements to waist measurements to hip measurements consistent with those of older women, especially of those who have added to their weight or who were already overweight before reaching 45?

This investigation seems to indicate that unless a figure is distorted by incorrect posture, if women maintained the ideal weight for age 35 they would have little trouble finding ready-to-wear clothes and patterns of satisfactory fit with no more costly alterations than those required for younger women.

Does Adequately Fertilizing the Land Affect the Health of People Living on It?

Willamay T. Dean[1]

Mrs. Dean is a home economist at the Virginia Agricultural Experiment Station, Virginia Polytechnic Institute. This article summarizes the findings of the study referred to in her article "Maintaining Survey Co-operation" in the November 1952 *Journal*.

THE investigation was set up by and functioned through six committees with members selected from the co-operating agencies. Two communities in Washington and Smyth Counties, Virginia, were selected for the experimental areas. By statistical procedure, each community was divided into two areas—one to receive prescribed fertilizer and the other to receive none.

In order to investigate the effect of the fertilization program on the health of the people, it was decided to collect data on those segments of the population considered most likely to reflect inadequate food intake. The following sex/age groups were selected for investigation: children 2 to 6 years old, boys 12 to 16, girls 12 to 16, women 20 to 40, and men 40 to 60.[2]

The co-operators in each of these groups were, as far as possible, selected by statistical procedure. The families in each area enrolled in the study were those which had some member of the right age and sex who was willing to co-operate.

For one week during each spring and fall that the study was in progress, all co-operators kept a record of their food intake. During each fall all co-operators were given physical examinations. When personnel was available, chemical analyses of blood and urine samples were also made. Data were collected from each co-operating farmer on crops planted, amounts of fertilizer applied, and estimated yield per acre of each crop. A detailed report of this study is to be published by the Virginia Agricultural Experiment Station (*1*).

[1] The author wishes to express her gratitude to William J. Darby, MD, of the department of medicine at Vanderbilt University and to Paul Johnson of the Tennessee Valley Authority for their suggestions regarding the preparation of this manuscript and to Boyd Harshbarger and M. E. Terry of the department of statistics of the Agricultural Experiment Station at Virginia Polytechnic Institute for their help with the tables. Mrs. Mildred T. Tate, head of the department of home economics at Virginia Polytechnic Institute, was chairman of this study.

[2] Throughout the study the same groups, with the same people in each, were maintained. Thus, in 1947, co-operators in each age group were three years older than when the groups were set up.

The Families

There was a total of 69 families co-operating in the study. Forty-six of these were in the areas selected to be given adequate fertilizer for each crop they raised during the four years the study was in progress. The remaining families were in the areas which were to be furnished no free fertilizer. General data collected on all co-operating families indicated that there were no marked differences between these two groups. The majority of the families had small incomes, 47 per cent having less than $500 per year. For the most part, the incomes were derived from both farm and nonfarm sources. Forty-seven per cent had their farms paid for and 11 per cent lived on rented farms. The farms had an average of about 48 acres, 12 of which were cultivated. Most of the farmers had only a small herd of cows, and small flocks of poultry were most frequently found.

Co-operation

A total of 255 members of the 69 co-operating families was at one time or another enrolled in the study. During the course of the investigation, the original number of co-operators was considerably reduced. Miscellaneous reasons for failure to continue co-operation were given; some left the community, while others lost interest in the project. Members of the families receiving no free fertilizer most frequently became nonparticipants. In order to maintain their co-operation, it was eventually found necessary to pay them a nominal sum for keeping the food records and having the physical examinations (*2*).

Agriculture

Before the fertilization program was initiated, an

investigation was made of the general agricultural situation in the areas. This showed that inadequate fertilization of crops was general on the farms in the two areas. This resulted in low yields of all crops.

Later data showed that when fertilizer as prescribed by the agronomy department of the Virginia Polytechnic Institute was applied to the crops raised by the farmers selected to receive free fertilizer, the yield per acre was greatly increased as was the number of livestock supported by the pastures. The farmers to whom no fertilizer was furnished retained practically the same fertilizing practices during the study and their production per acre remained low.

Medical Aspects

Each co-operator received a thorough physical examination sometime during the fall of each year he was enrolled in the study.

The doctor selected to make the physical examinations was in charge of the medical phases of the study. He was head of the Konnarock Health Center (supported by the Board of American Lutheran Missions) and was also the local physician. Surprisingly, he found a relatively small number of signs and symptoms of abnormality during the four years; nor did he observe any marked differences in the incidence of the signs and symptoms between the first and last years of the study.

The most stable groups of co-operators appeared to be the women and children. In an effort to assess as accurately as possible the effect of the four-year fertilization program, a detailed study of the clinical findings of the women and children who remained in the study from 1944 through 1947 was made. The data were classified by the soil treatment received by the farms on which these co-operators lived. There was a total of 25 children and 14 women who lived on farms receiving adequate fertilizer and 7 women and 17 children on farms receiving no free fertilizer.

The co-operators were examined for 43 signs and symptoms which might indicate an inadequate food intake. A summary of these data in table 1 shows that the total incidence of abnormal signs and symptoms for which the examinations were made was relatively small for both the children and the women. In 1944 out of a total of 1,075 observations made on the children in the fertilized area, only 156 abnormal signs and symptoms were found. Among the children in the areas receiving no free fertilizer in the same year, from 731 observations, 108 were found to be pathological. In 1947 the incidence of abnormal conditions found in each group of children was still small but somewhat greater than in 1944. This might be due to the fact that the children were three years older.

A different situation was found among the women. The total incidence of abnormal physical findings in each area was small in both 1944 and 1947.

The eyes, lips, mouth, and skin were the areas

TABLE 1

Summary of medical examinations made on women and children who remained in the study for the four years it was in progress by areas and years

AREA FURNISHED PRESCRIBED FERTILIZER				AREA FURNISHED NO FREE FERTILIZER			
Group	Number	Number of Abnormal Conditions Observed		Group	Number	Number of Abnormal Conditions Observed	
		In 1944	In 1947			In 1944	In 1947
Women	14	171	167	Women	7	83	76
Children	25	156	225	Children	17	108	152

TABLE 2

Hemoglobin levels and average daily iron intake for different sex/age groups by soil treatment and year

GROUP	YEAR	SOIL TREATMENT	NUMBER IN GROUP	HEMOGLOBIN*	IRON INTAKE*
				g/100ml	*mg*
Children 2 to 6	1945	Fertilized	37	13.0	8
	1945	Non-fertilized	24	13.0	11
	1946	Fertilized	34	13.0	9
	1946	Non-fertilized	23	13.7	11
	1947	Fertilized	21	13.9	10
	1947	Non-fertilized	20	14.4	13
Boys 12 to 16	1945	Fertilized	17	15.2	11
	1945	Non-fertilized	6	14.1	17
	1946	Fertilized	12	16.5	14
	1946	Non-fertilized	4	15.4	11
	1947	Fertilized	4	16.4	12
	1947	Non-fertilized	1	17.1	13
Girls 12 to 16	1945	Fertilized	16	14.3	8
	1945	Non-fertilized	7	13.7	10
	1946	Fertilized	13	14.0	9
	1946	Non-fertilized	4	12.7	8
	1947	Fertilized	8	14.7	13
	1947	Non-fertilized	3	15.2	11
Women 20 to 40	1945	Fertilized	21	14.2	9
	1945	Non-fertilized	13	14.3	12
	1946	Fertilized	19	13.0	10
	1946	Non-fertilized	10	14.4	10
	1947	Fertilized	13	13.8	10
	1947	Non-fertilized	8	15.0	12
Men 40 to 60	1945	Fertilized	13	15.8	12
	1945	Non-fertilized	5	15.9	14
	1946	Fertilized	13	14.6	16
	1946	Non-fertilized	4	16.7	14
	1947	Fertilized	9	15.4	14
	1947	Non-fertilized	4	16.0	12

* Values obtained in the fall.

where the majority of the pathological conditions were found. In 1944 and 1947 among 50 per cent of the women and children, at least one of the following symptoms and signs were found to be pathological:

CHILDREN

Symptoms	*Signs*
Eyes:	Eyes:
burning	circumcorneal injection
photophobia	Lips and mouth:
lacrimation	red and cracked
night blindness	angular fissures
Neuromuscular:	Tongue defects
paresthesia	Gums:
	swelling
	redness
	Skin:
	keratosis pilaris
	ichthyosis
	Extremities:
	muscle tenderness
	subcutaneous tissue
	Abdomen:
	abnormal
	liver enlarged

WOMEN

Symptoms	*Signs*
Eyes:	Eyes:
night blindness	circumcorneal injection
burning	Lips and mouth:
photophobia	red and cracked
lacrimation	angular fissures
Neuromuscular:	Tongue defects
paresthesia	Gums:
dizziness	swelling
Menses:	redness
excessive flow	retraction
Gastrointestinal:	Skin:
gas	ichthyosis
	Extremities:
	muscle tenderness
	edema
	Abdomen:
	abnormal

Laboratory Findings

Analyzing the blood for certain constituents was part of the over-all physical examination. Only data on hemoglobin, total plasma protein, and ascorbic acid will be discussed here. In the tables where comparisons are made between blood nutrients and food intake, the averages for each are based on the same individuals.

Hemoglobin determinations were made for three years—1945, 1946, and 1947—on all co-operators. Determinations of total plasma proteins were made for two years and, as the amount of blood collected from the children did not permit analyzing for total plasma protein, these determinations were made only on adolescents and adults. For the methods used in this study, hemoglobin values below 13 grams per hundred milliliters of blood were considered abnormal. Total plasma protein was considered abnormal if less than 6 grams per hundred milliliters; 1.6 milligrams of ascorbic acid per hundred milliliters of blood was considered the normal level (*3*). No values for hemoglobin or total plasma proteins were found to be below these standards.

In an effort to study the hemoglobin values in relation to mean iron intake for a week in the fall, table 2 was prepared. From these data, it can be seen that, with the exception of the men and children, the mean iron intake was frequently below that recommended by the National Research Council (*4*), while the mean hemoglobin values were, in every instance, higher than that considered normal. In most instances, both the mean intake of iron and hemoglobin concentration were greater in 1947 than in 1945.

A study of the relationship between the average concentration of total plasma protein and the average protein intake for a week in the fall is presented in table 3. The data show that the mean daily intake of protein was, in most instances, below the NRC recommended allowances, while, as previously stated, the mean total plasma protein was found to be normal. The mean intake of protein was not consistently higher for 1946; however, in all but one instance the plasma levels were higher in 1946.

TABLE 3

Average plasma protein levels and average daily protein intake for different sex/age groups by soil treatment and year

GROUP	YEAR	SOIL TREATMENT	NUMBER IN GROUP	PROTEIN	
				Average Total Plasma Protein	Intake
				g/100ml	*grams*
Boys	1945	Fertilized	11	7.2	82
12 to 16	1945	Non-fertilized	5	7.2	88
	1946	Fertilized	10	12.5	78
	1946	Non-fertilized	4	8.3	73
Girls	1945	Fertilized	14	7.3	53
12 to 16	1945	Non-fertilized	3	8.6	53
	1946	Fertilized	12	8.3	53
	1946	Non-fertilized	1	7.4	55
Women	1945	Fertilized	17	7.2	52
20 to 40	1945	Non-fertilized	10	7.3	67
	1946	Fertilized	16	8.6	51
	1946	Non-fertilized	9	8.3	60

The results of the determinations made for ascorbic acid on whole blood and the average daily ascorbic acid intake for one week during the fall, as well as the occurrences of gum defects, are presented in table 4. The mean intake of ascorbic acid was below the NRC recommendation; the concentration of ascorbic acid in the blood was low; and the incidence of gum defects was high. In 1946, except among the boys, the mean ascorbic acid intake and the ascorbic acid concentration were slightly higher.

The data presented in tables 2, 3, and 4 show no consistent differences between the co-operators living on farms receiving the different soil treatments.

In the fall of 1946 while the physical examinations were being given, oral doses of 5 mg of thiamine, 5 mg of riboflavin, and 50 mg of nicotinic acid amide were given to 28 adults living on farms receiving prescribed fertilizer and to 13 adults who lived on farms which received no free fertilizer. After a two-hour period, the urinary excretion of these three vitamins was measured for each group of adults. The mean excretion of each vitamin as well as the range is presented in table 5. Except for the excretions of thiamine, there appeared to be little difference between the groups living on the farms receiving different soil treatments (*5*).

Food Consumption

Each of the four years the study was in progress the co-operators kept a record of the food they ate during one week in the spring and one week in the fall. A complete report of this phase of the study for each individual co-operator will appear in a forthcoming Virginia Agricultural Experiment Station bulletin (*1*).

However, to check again the effects of the fertilization of the soil on the health and well-being of the people, table 6 was prepared. It presents for the first and last years of the study the average daily intake of nine nutrients for each sex/age group by soil treatment. The yearly averages are based on the intake of each nutrient for one week in the spring and one week in the fall. The food records were calculated by the short method (*6*). Table 6 also shows the findings of this study and comparisons with the NRC recommended allowances.

Before discussing in detail the food intake of the different sex/age groups, three general statements can be made. First, while the mean intakes of the different nutrients, as shown in table 6, were frequently adequate as compared with the NRC recommended allowances, there were in each sex/age group many individuals who had intakes of different nutrients which were below the recommendations. Second, when the mean food intake of the different sex/age groups was studied by soil treatment, no consistent differences appeared. Third, in all groups the ascorbic acid intake was less satisfactory than was that of any other nutrient. The NRC recommendation for this nutrient was met by no groups in either 1944 or 1947.

Children 2 to 6. Both in 1944 and 1947 the children's mean intake of most of the nutrients met or approximated the NRC recommended allowances. The exception was found in the 1944 niacin intake of the children living on farms receiving free fertilizer. The children, more consistently than any

TABLE 4

Average ascorbic acid levels in whole blood and average daily ascorbic acid intake for different sex/age groups by soil treatment and year; number having gum defects in same group

GROUP	YEAR	SOIL TREATMENT	NUMBER IN GROUP	ASCORBIC ACID		NUMBER HAVING DEFECTIVE GUMS
				Average Concentration in Blood	Average Intake	
				mg/100ml	*mg*	
Boys 12 to 16	1945	Fertilized	13	0.83	39	13
	1945	Non-fertilized	6	1.06	57	6
	1946	Fertilized	11	0.77	38	10
	1946	Non-fertilized	4	0.90	34	4
Girls 12 to 16	1945	Fertilized	16	0.82	24	9
	1945	Non-fertilized	6	0.86	31	6
	1946	Fertilized	11	0.92	26	5
	1946	Non-fertilized	3	1.02	36	3
Women 20 to 40	1945	Fertilized	17	0.58	35	12
	1945	Non-fertilized	13	0.79	33	12
	1946	Fertilized	15	0.88	38	7
	1946	Non-fertilized	9	0.99	36	5

TABLE 5

Two-hour urinary excretion after an oral dose of 5 mg thiamine, 5 mg riboflavin, and 50 mg nicotinic acid amide (5)

AREA	NUMBER IN GROUP	THIAMINE EXCRETED		RIBOFLAVIN EXCRETED		N'-METHYL-NICOTINAMIDE EXCRETED	
		Mean	Range	Mean	Range	Mean	Range
		micro-grams	*micro-grams*	*micro-grams*	*micro-grams*	*milli-grams*	*milli-grams*
Fertilized	28	132.9	26.6 to 312.4	575.5	52.4 to 1802.1	5.58	0.68 to 50.00
Non-fertilized	13	261.0	36.8 to 1622.5	598.1	60.4 to 1392.7	4.89	0.88 to 16.24

of the other groups, showed an increased mean intake of all nutrients in 1947. This might be due to their increased age. When compared to other sex/age groups, the children were found to be the best nourished co-operators. One explanation might be that, for the most part, the children were of preschool age and the mothers may have given their diet more attention than they did those of the adults and older children in the family.

Boys 12 to 16. In general, the average food intake of the boys was unsatisfactory. The mean intakes of vitamin A and riboflavin were the only ones which met the recommended allowances, while the mean intake of thiamine approximated the recommendation.

TABLE 6

Mean intakes of different sex/age groups for first and last years of study by area compared to National Research Council's recommended allowances (4)*

AREAS AND YEARS	NUMBER IN GROUP	ENERGY	PROTEIN	CALCIUM	IRON	VITAMIN A	THIAMINE	NIACIN	RIBOFLAVIN	ASCORBIC ACID
		calories	*grams*	*grams*	*mg*	*IU*	*mg*	*mg*	*mg*	*mg*
Children 2 to 6										
Fert.-1944	63	1502	48	0.87	7	4084	0.82	5	1.73	34
-1947	53	1762	56	0.94	10	4197	1.10	7	1.92	32
Non-fert.-1944	31	1662	52	0.86	8	4507	0.87	7	1.92	29
-1947	45	2050	67	1.07	11	4425	1.40	9	2.34	40
NRC rec. allow.		1600	50	1.0	8	2500	0.8	8	1.2	50
Boys 12 to 16										
Fert.-1944	31	2147	71	1.10	11	5309	1.52	9	2.37	36
-1947	23	2534	80	1.36	14	8496	1.49	12	2.88	48
Non-fert.-1944	10	2420	67	1.03	11	7093	1.23	9	2.33	46
-1947	5	2076	72	1.06	11	3294	1.62	11	2.24	29
NRC rec. allow.		3200	85	1.4	15	5000	1.5	15	2.0	90
Girls 12 to 16										
Fert.-1944	34	2012	63	0.82	11	5612	1.40	9	2.00	38
-1947	17	1792	58	0.84	12	6184	1.27	9	1.80	45
Non-fert.-1944	16	1837	62	0.87	10	3454	1.41	9	1.87	34
-1947	7	1788	55	0.65	10	4286	1.19	10	1.54	22
NRC rec. allow.		2600	80	1.3	15	5000	1.3	13	2.0	80
Women 20 to 40										
Fert.-1944	47	1769	57	0.89	10	5724	1.12	8	1.94	42
-1947	33	1595	56	0.86	9	4683	1.00	8	1.84	36
Non-fert.-1944	21	1791	57	0.77	10	5894	1.06	9	1.91	39
-1947	18	1971	69	1.00	12	4345	1.29	11	2.33	37
NRC rec. allow.		2400	60	1.0	12	5000	1.2	12	1.5	70

* Throughout the study the same headings with the same people in each group have been maintained. Thus co-operators in each age group are three years older in 1947 than when the groups were set up.

Girls 12 to 16. The mean food intakes of the girls failed more often to meet the recommended allowances than did those of any of the other sex/age groups. The only relatively satisfactory intakes were those for vitamin A and riboflavin. The intakes of iron, calories, calcium, and protein were the lowest in relation to recommendations. It was felt that the vogue to be slender might have influenced the girls in this study to restrict their food intakes.

Women 20 to 40. The women had mean intakes of all nutrients which fell within a reasonable range of the recommended allowances except in the case of calories, niacin, and ascorbic acid. One reason advanced for this was that many of the co-operating women conferred frequently with the local physician either about their health or that of their children. His continual emphasis on the relationship between good health and food habits was thought to have influenced the diets of the women.

Summary

In the early nineteen forties, a study was designed to test the effect of a soil fertilization program on the health of people living on the soil.

Prior to the field work, the areas to receive the prescribed fertilizer as well as those to receive none had been statistically selected. The age and sex groups to be investigated had been determined and, in so far as possible, the group members had been similarly selected.

The study was conducted for four years, 1944 to 1947. During the spring of each year, the co-operating farmers in the areas selected to receive the free fertilizer were furnished, for application to all their crops, the amounts and kinds of fertilizer considered necessary by the department of agronomy at Virginia Polytechnic Institute.

A record of the food intake of each co-operator for one week in the spring and one week in the fall of each year the study was in progress was obtained. During the fall of each year the

study was in progress, a competent physician gave each co-operator a physical examination. During the last three falls of the study, blood samples were drawn from most of the co-operators. Various analyses were made on these samples. The most complete determinations were made during the fall of 1945; however, it was possible to make hemoglobin determinations during each fall.

Comparisons between the results in 1944 and 1947 show the following:

Crops raised by the farmers receiving no free fertilizer showed no increase in production.

Where prescribed fertilizer was applied to crops, there was a remarkable increase in production. The study of the data collected during the four years the study was in progress revealed no evidence that health status or food consumption was significantly changed as a result of the increased agricultural production.

At the time the study was initiated, for many of the nutrients, the mean intake levels of the sex/age groups studied were comparable to the National Research Council's recommended allowances. The most pronounced exceptions were the mean intakes of ascorbic acid, niacin, and calories. The children were the best nourished group, while the girls had the lowest mean food intake. There was little consistent change in the average nutrient consumption between the first and last year of the study with the exception of the children.

Little change was detected in the relatively satisfactory over-all physical condition of the women and children who remained in the study during its four-year duration.

As shown in table 2, the mean hemoglobin values were above normal for each sex/age group. There was little difference between determinations made the first year and those made the last year of the study.

Conclusions

This investigation was carried on for four years in areas which at the beginning of the study were isolated and in which many families had very low incomes. From analyses of data collected during the study, the following conclusions were drawn:

1. The feasibility of a study of the nutritional status of population groups in a relatively isolated area has been demonstrated.
2. Numerous difficulties will be encountered in maintaining a long-term investigation of this sort.
3. Improved soil fertility does make possible improved economic conditions as well as the production of a greater variety of food, both of which factors could result in improved food consumption patterns.
4. Increased production of crops followed the use of the amounts and kinds of fertilizer recommended.
5. Observable changes in food intake or in the health of the people did not follow increased production during the course of the study.

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National Home Demonstration Week

National observance of Home Demonstration Week for 1953, the golden anniversary year of extension work, will be observed from May 3 to 9.

Other meetings of interest to rural women will be the Triennial Conference of the Associated Country Women of the the World in Toronto, Canada, August 12 to 23; the annual meeting of the Country Women's Council of the USA in Toronto, August 24; and the annual meeting of the National Home Demonstration Council in Boston, August 31 to September 5.

My Career as Home Economist-Artist-Manufacturer

Esther S. Dendel

Mrs. Dendel earned her B.S. degree in home economics with a major in applied art and has an M.A. from Teachers College, Columbia University. She has done home economics extension work, taught art in a city school system, acted as an instructor in related art in a university home economics department, and written a highly successful book about Liberia.[1] She is now a manufacturer of ceramics.

I AM sometimes asked how I—a person trained in home economics—happen to be so far afield from the profession in which I took my training. This amazes me, for I do not feel that I am far afield from home economics, or even "on the fringe." My concept of home economics is that it is training to *live creatively,* to have a creative attitude toward daily living. My husband and I are *manufacturers* of what we create because this is the means by which we are able to create more forms that have both beauty and usefulness to contribute to everyday living.

I began thinking about the need and possibility for commercial design in the housewares field as a home economics student—but my ideas did not crystallize into plans until I lived in Africa and saw how the natives there use articles with rare beauty of line in their homes.

The design of the dinnerware we make was inspired by the rice bowls and ritual spoons we saw in the African jungles. An old African chief called the shape of an egg the most beautiful form God has designed, and the egg-oval of which he spoke has become the basis of our design. We took the colors of the glazes of our dinnerware from our nostalgic memories of the earth, forests, and people we knew in Africa.

A Creative Field

My husband and I consider ourselves fortunate to be able to make our living in a creative field. I believe I first realized my need to be creative on a decisive night in my childhood, when I suddenly discovered the beginning of a driving urge to *understand* and felt a thrilling exhilaration in finding out about things. Years later it came back to me vividly one evening in a plantation house in West Africa. The night was one of smothering tropical darkness when the heat wraps itself around your body like a woolen blanket that can't be shaken off. It was too hot to dance, and a group of us were playing "What are you like?" Each of us was to characterize the person being considered in ten words or fewer. I was first. I did not expect anyone to say I was witty or beautiful, but I thought one might say I was a good cook. The man who began said, "You have the largest curiosity of anyone I have ever met."

He broke the ten-word rule and went on, "I don't mean a petty curiousness. I mean the kind that makes you *have* to know. I've tried to puzzle out why you like Africa so much, and I've decided it is because you get pleasure from learning new things."

For a moment my thoughts went back to a night in midwinter when I was twelve years old, muffled in an overcoat, sitting on the well platform of our Iowa farm, with a flashlight in one hand and a star map in the other. That was the night I saw the stars for the first time, *really* saw them. Before that they had been pretty twinkly lights, distant and impersonal. I had heard at a 4-H Club meeting that the sky was peopled with strange and wondrous creatures, all there for anyone with imagination to trace out. Not only were they there, but the characters on the stage of the sky changed with the seasons like actors in a never-ending play.

As I watched the sky, I felt that I could stand on the handle of the Big Dipper and steady myself at that dizzy height by holding fast to the tiny star just above the bend in the handle—I could grasp this friendly little star like the knob of a

[1] E. WARNER, *New Song in a Strange Land.* Boston: Houghton Mifflin, 1948, 302 pp.

Mrs. Dendel prepares to load a tray of pitchers into the kiln for the second firing. She develops the glazes and her husband is the designer of the pottery.

cane and feel it warm and trembling in the palm of my hand. And from this height I felt I looked down on the blue ice-prairies of the North Pole.

When my mother called to me to come inside, I seemed to fall off the Dipper with a thud which made me feel physically ill. But I had experienced something that has never left me. It was as though a darting ray of starlight had pierced a darkness inside me. I knew, with an almost terrible knowing, that the world was filled with other wonders as great as this night's discovery. Blind to them all before, I would *have to find out!*

This decisive night of my childhood, this beginning of a driving urge to understand, this thrilling experience of finding out about things, kept me in college studying home economics during the lean depression years.

It helped me when we started our business of manufacturing dinnerware on a shoestring. To make our first pieces, we worked on the kitchen table and fired one little second-hand kiln in the garage. Now our plant is spread over two city lots and we employ 14 persons. Our selling is mostly wholesale—to certain large department and specialty stores and many small stores.

Our next big project is to build a house which is to have large ceramic murals. While planning it I found myself making good use of the principles taught in the house planning laboratory required in my home economics course, and I realized again how home economics helps me live creatively.

Annual Meeting Ahead

SARA BAUGHMAN
President, College Clubs Department, AHEA

We are thrilled with the plans we've made for the college clubs program at the annual meeting. Top billing will be given our "Parade of Personalities," because our committee agreed that there are many prominent persons in home economics and in other important fields whom we are eager to meet. After we receive your further suggestions, invitations will go out. Those who accept will be interviewed on our program.

Our committee feels college club convention-goers will not want to miss the general sessions, with their theme "YOU Are the Key to Better Relations," or the eye openers, where the newest in foods, clothing, and housing and equipment will be demonstrated. Besides, we are planning many opportunities for college club delegates to get acquainted. Already scheduled are a box supper and an evening at the Starlight Theatre.

Dual-Purpose Uniforms. *The uniforms shown above being worn by home economics students at the University of Kansas keep the girls looking fresh and neat in the laboratories and the uniforms are also the means by which the home economics club earns money. In 1948, the members agreed they wished to start a project for the benefit of others. They borrowed a small amount of capital to purchase material and have the uniforms made. A rental fee of $3 per student is assessed for laundering, repairing, and depreciation costs. There is usually a profit of $300 to $400 per year. The club places this in a special fund to be drawn on only for the expenses of a foreign student.*

Alumnae Evaluate Homemaking Program

KATHARINE S. RUDESEAL
Avondale (Georgia) High School

Often during the fourteen years that I have been teaching homemaking in the Avondale community, I have wondered—as all teachers must do from time to time—just how effective our program was and whether or not we were helping our pupils to become better homemakers. At last, we decided that one way to get an answer to these questions was to ask our alumnae.

We felt that this would not be too difficult a job, since we keep in rather close contact with them through a homecoming each summer and through an alumnae organization. To be eligible for membership in the organization, one must meet these three requirements: (1) be an alumna of the Avondale homemaking department, (2) have made a successful marriage, and (3) have at least one child.

At homecoming time, the girls return to the department for a day. We prepare lunch, exchange pictures of new babies, and give suggestions for making the curriculum more effective. Since this is the only time that some of the girls ever see each other, time is provided just for talking and "catching up."

For our survey, a questionnaire was made up and sent to 75 Avondale alumnae. Ninety per cent of the questionnaires were returned. We suggested that the girls not put their names on them, but three-fourths of them did sign their reports, and many added notes or sent letters. We received reports from all over the United States and from one student who has been in Germany for three years.

The group of girls on whom we made our report was composed of three groups: (1) 80 per cent were girls who had had homemaking education, (2) 2 per cent were high school graduates but they had had no homemaking, and (3) 18 per cent were girls who had had homemaking but were not married. Eighty-nine per cent were high school graduates. Average time spent in school was nine and one-half years for those who did not graduate. The group had an average of two and one-half years of homemaking in high school.

All of the girls who are married said they felt their homemaking had helped them in establishing their homes, rearing their children, and getting along with their husbands.

Each married woman who had had no homemaking said she had felt a need for this training.

Among the units which seemed to be most helpful to the group are child care, growing up, family relations, home management, and preparation for marriage. Units which the girls felt should be added to our curriculum are: general psychology, more information on money management and budgets, as well as information on the emotional development of the child.

Ninety-seven per cent of the husbands expressed a feeling that homemaking training is good. There were no flat "No" answers to this question, but three per cent left it blank.

In considering the most serious problems of young married people today, finances headed the list. This was verified by a divorce lawyer who spoke to our class in marriage and family living. Other problems which the girls mentioned were: getting married too young (both chronologically and emotionally), failure to choose a mate wisely, personal adjustments, being separated because of military service.

All of the girls, with the exception of one, said their marriages were happy. As this one girl said that she was still working at it, there is hope for her.

When asked what they felt was the chief cause of divorce in their own communities, alcoholism led the list. Other reasons which were given were: nagging, working matters, other women, unwise use of money, inability to settle down, and lack of co-operation.

Eighty-nine per cent of the group feel that they can tell a difference in the homemaking ability of their friends who have taken courses in homemaking and those who have had none. Nobody answered this question "No," but 11 per cent did not answer it.

All but one of the group felt that boys, too, should study homemaking. All except two thought we should have classes in preparation for marriage for both boys and girls. Most of the girls felt this course should be taught in mixed classes; a few thought that the groups should be separate. This course would include such units as home planning and furnishing, money management, self-understanding, choosing a mate, and child care.

Only one of the group felt that homemaking

ANKERS

The Ellen H. Richards Room

The Ellen H. Richards Room is the most recently completed room in the headquarters building of the American Home Economics Association. Furnishings of the room were the gift of the Massachusetts home economists. A large part of the money for the room was obtained through the sale of stationery under the chairmanship of S. Agnes Donham. At the suggestion of the Massachusetts group, the room was furnished in the style of the period of Mrs. Richards' life. The silk quilt across the arm of one chair was made by Mrs. Richards. Both the quilt and the fireplace tools, which belonged to the first president of the AHEA, were the gifts of a friend of the Richards family, through Katherine L. Baker. The framed picture on the desk, not shown in the picture, was the gift of Mrs. Richards' nephew.

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should not be required. This person gave as her reason that those who were not interested might bother the others. There was a feeling among the group that girls should take homemaking for three years.

All of the unmarried girls, too, felt that their homemaking had benefited them. Below are some of the ways they think it has helped:

To decorate my college room
To help take care of my family
To make my own clothes, to prepare family meals, and to understand feelings of others
I can plan for the future knowing that I can take care of my home, my husband, and my children.

In response to the question "What can homemaking education do to help future couples solve their problems?" we got these answers:

Teach the fundamentals of buying and budgeting.
Teach more about how to solve problems.
Give them a clear insight into the responsibilities of marriage.
Teach them confidence, poise, and independence, for this makes them secure under any circumstances.
Teach the boys as well as the girls that marriage is the big job.

The most interesting parts of the reports were the letters and postscripts which came in with the questionnaires. Below are a few quotations from them:

I give all the credit for my successful marriage to my Home Economics training. It has helped me through all the eleven years of marriage and in rearing my two children.

Just the other day I bought enough material for $3.95 to make my husband three shirts. When anyone has learned enough in Home Economics to get three times for the price of one, I would say Home Economics is wonderful.

I feel that my home economics has been most beneficial and I would not be able to manage my home and live within our salary if I had no knowledge of buying and budgeting.

I made gifts for all the ladies on my Christmas list and sold enough to do all the buying for the children; my husband felt very proud of me and this made me very happy.

The results of the survey are very heartening to us. They seem to affect us in three ways:

1. They lead us to believe that we are doing some good.
2. They show us our job is not yet complete.
3. They give us zeal and enthusiasm to keep working.

The 4-H Club Home Improvement Program

AGNES M. HANSEN
Assistant State 4-H Club Leader, Wisconsin

Projects for the 4-H Clubs have always grown in response to the expressed needs and interest of 4-H boys and girls. In view of the present economic situation where families are building and changing homes, it seemed timely to review the 4-H home improvement program.

What can be done to meet the needs of the 200,000 4-H boys and girls who enroll in the home improvement project each year? How can the project be made more meaningful and in keeping with present-day needs? How can the hundreds of 4-H local leaders be helped to guide the work of the young people?

To work out some answers to these questions the national 4-H home improvement committee was appointed to represent extension leaders and the National Committee on Boys and Girls Club Work with the sponsors of the program. One home

furnishings specialist and one state 4-H Club leader from each of the four extension sections and Gertrude Warren and Mary Rokahr of the federal Extension Service were the extension leaders on the committee. The report of their March 1952 meeting was given nation-wide distribution, furnishing state extension leaders with a statement of long-time objectives and goals and a broad philosophy of the place of 4-H home improvement work in the total Extension Service program.

A manual for local leaders has been written by Tena Bishop, assistant state leader in Massachusetts, and Ruth Jamison, home furnishings specialist in Virginia. Inspiration and practical helps are given in this "4-H Home Improvement Guide for Local Leaders." Most important is the broad interpretation of the program which encourages individual planning to fulfill the special needs of the member and the family.

It is hoped that the work of the national home improvement committee will help youth share in the improvement of their homes. To quote the committee report:

> Home improvement 4-H club work is one of the most important of all projects because of its influence on the way of living. The project builds family solidarity and family co-operation. The training it can give can greatly strengthen the future homes of our country.

The committee felt that the home improvement program can best service the needs of youth in an age of insecurity by bringing about:

An appreciation of home as a place where individual needs of all family members are met

A recognition that furnishings and home planning are a means of developing satisfactory human relationships among family members and friends

An acceptance of the fact that homemaking is increasingly a co-operative activity involving all family members, and the 4-H program should therefore involve younger as well as older boys and girls

An interpretation of these goals for youth was stated in terms of members and family needs. These were:

A fulfillment of special individual needs as: a place of my own, a place to sleep, a place to store clothing or things related to my hobbies, and a place to study or pursue other activities of my choice

A feeling of pride in my home as a place where friends are welcome

A feeling of satisfaction and accomplishment through acquiring skills and efficiency in homemaking

A sense of judgment and knowledge in buying home furnishings

An understanding of how we can make our home serve our needs better

Reports from various states tell a story of new interest and increased enrollments, of new projects and literature written to appeal to boys and to younger members. Special training for agents and local leaders is being planned to give support to this important program.

Preserving Our Textile Heritage

MARY C. WHITLOCK
University of Rhode Island

Home economists need readily available historical material to illustrate to students the development of textiles and clothing. By studying such articles students can be guided in their appreciation of the beauty and quality of the textile achievements of the past and of the relation of old costumes to previous modes of living and customs. As a result of such study, students also can be led to appreciate more fully the contributions of modern industry to the type of clothing and home furnishings needed for happy, comfortable present-day living. In addition, historic textiles and costumes can be used as a never-ending source of inspiration for modern fashions.

Textiles, like other arts, can act as a universal language in fostering an understanding of peoples of different nations. Therefore, good teaching material should include not only examples of American textiles and clothing that are so close to our personal heritage but also articles from other countries.

The College of Home Economics at the University of Rhode Island, in addition to realizing the need for teaching exhibits, recognizes the privilege of acting as a repository for some kinds of important Rhode Island historical material. Once tapped, the resources of local communities flow in an amazing way to institutions where treasured heirlooms will receive proper care.

Efforts to pursue valuable historical articles are indeed timely. The famous sad words "It might have been" express the feeling of regret when one learns of the trunks full of lovely garments and textiles that have been burned or given to the junkman because no one knew what to do with them in the hurried moments of moving or of settling an estate. On the other hand, it is heart

warming to sense the satisfaction of older people who are able to plan wisely for the care of their heirlooms. Many older individuals have no children or close relatives to whom they can give their treasures. Others have children, but the smaller homes of the present generation preclude absorbing and caring for many family heirlooms.

During the last year the department of textiles and clothing in the College of Home Economics at this University has been particularly fortunate in being able to enlarge its teaching collections of historic textiles and clothing. Dealers in antiques, once acquainted with the needs of the department, have generously donated fine examples of materials, garments, or costume accessories.

Further interest was stimulated in the collections by an article carried in one of the city newspapers which illustrated one phase of the existing collection, namely Indian and Paisley shawls. People wrote, telephoned, or sent messages to the department suggesting that they would like to give family shawls to the collection, asking for help in identifying family pieces, or asking advice regarding disposal of their heirlooms. Conferences about the shawls have been most gratifying in the sense that staff members have become acquainted with a larger number than usual of residents of the state. Likewise, when people have learned of the wide scope of the department's teaching collections, gifts of many articles other than shawls have followed. For example, one gentleman wrote offering to give his grandmother's worn and frail Paisley shawl to the department. The subsequent call to get the shawl resulted in the gift of over 100 articles that span a century of textile and clothing history. Following the death of this donor, the executor of his estate has co-operated by contributing many other objects. An offer from a Rhode Island woman to give two shawls to the department resulted in gifts of many valuable articles not only to the textiles and clothing department but also to the teaching collections for food and nutrition and home furnishing classes. During the academic year 1951-52 alone, gifts of historic textiles, clothing, and clothing accessories reached the 250 mark.

Many and varied avenues lead to historic treasures and a chance word may act like the famous magic words "Open Sesame" to give access to stored possessions. When an interesting recent acquisition is mentioned in casual conversation, the listener may glance away with a far-away look in her eye and express a determination "to look up something in the old trunk in the attic." A keen observer at an auction catches a glimpse of an exquisite, handmade and hand embroidered dress that is just about to be "thrown in" with a lot of household textiles. A friendly plea to the auctioneer saves the lovely garment for a better fate, at the small cost of 50 cents. A good memory retains the name of the person who bought a gorgeous French gown at an auction. At the first opportunity this lead is followed up with the ensuing information that the gown was purchased just to be worn at a masquerade party but that the owner would be glad to give the garment to the department's collection. In this particular case, the story is not yet ended. When the dress was delivered, it was accompanied by other fine articles. Through the co-operation of this same woman and her friends, rare and lovely items have joined the collections.

Thus, a teaching collection grows. From members of the housekeeping staff to the dean of the College and the controller and president of the University, active interest is taken in furthering the good work in the College of Home Economics.

Acquiring such teaching collections involves the responsibility for intelligent and efficient care and storage of the objects and sharing them with the public as well as using them for class study. Inventorying each article, making a permanent chronological acquisition record, and the clear identification of each piece by a label are laborious but necessary activities. When proper storage and display facilities are not available, they should be secured at the first opportunity.

Many articles that come to historic collections have to be restored before they can be efficiently studied or attractively displayed. Suggestions regarding the care and storage of such collections can be obtained from curators of museums or directors of art schools. Another important source is the series of "Workshop Notes" which can be purchased from the Textile Museum, 2320 S Street, N.W., Washington, D.C. There are six monographs in the series: Nos. 1 through 4, 75 cents each, 5 and 6, $1 each.

The rewards to those who help preserve our textile heritage far outweigh the labor involved. It is gratifying to watch the increased interest and appreciation of students for their own heirlooms and for the ancestors who created or owned the objects. It is a pleasure to watch the relief of an older person who feels that prized possessions will be cared for and not destroyed. It is also satisfying to watch the pride of those who have so shared their heirlooms with others. Furthermore, assembling and working with historic textiles and costumes is an exciting pastime! It is fun!

Teach Home Economics—a Career with a Future

Just off the press!

Written for teen-agers by a special committee of the elementary, secondary, and adult education department of the AHEA, *Teach Home Economics* describes the opportunities and the satisfactions of teaching home economics in elementary and secondary schools and in adult homemaking programs.

Schools or associations using the booklet for recruitment may stamp the name of the school on the booklet. *Teach Home Economics* sells for 20 cents per copy.

AHEA Votes for National Officers

Ballots have gone out to all AHEA members for election of national officers. Ballots must be postmarked for return to AHEA headquarters not later than April 24.

The officers of the American Home Economics Association to be elected this year are:

President-elect
One vice-president
Recording secretary
Three members of the nominating committee
Chairmen-elect of departments
Secretaries of departments
Vice-chairmen of divisions

The *president-elect* will become president of the Association at the annual meeting in 1954. During the coming year she is a nonvoting member of the council, executive board, and executive committee.

The three *vice-presidents* of AHEA serve for three-year terms with some defined duties and some followed by precedent.

The *recording secretary* is responsible for the minutes of all business meetings of the Association and its governing bodies and conducts such correspondence as the governing bodies may direct.

Three of the five *nominating committee members* are elected in odd years and two in even years.

Please vote for the national officers, three members of the nominating committee, one department chairman-elect and one department secretary in the *same* department, and one division vice-chairman.

Home Economics in Business. Members of the HEIB department will vote for one candidate, Corris H. Guy, for chairman-elect and for one candidate, Reidun K. Sweeney, for secretary of the department. The AHEA headquarters staff regrets that the name of the office for which Miss Sweeney was nominated was omitted from the ballot as mailed to each member. HEIB members have received a correct supplementary ballot.

Mail your ballot promptly.

Pay AHEA Dues During Spring Months

Bills for the next membership year of the American Home Economics Association were mailed to present members of the Association at the end of last month. Pay *your* dues now before summer and vacation time come along.

While you're on vacation, AHEA headquarters staff can process your membership, prepare your membership card, check your address on next year's JOURNAL mailing list—in short, things will continue running along smoothly and you'll remain a member in good standing. Membership cards will be mailed in September.

Members who do not pay dues promptly must be sorted out and sent special reminder notices. These are expensive operations and take time away from other headquarters services. When the new fiscal year begins, 1953-54 membership cards and the September JOURNAL are mailed only to those who have paid their dues for 1953-54. By the time the member realizes why she hasn't received her September JOURNAL and hastens to send her dues to the AHEA headquarters or to the state treasurer even more time has gone by. By the time her payment is received at headquarters and all of the necessary changes made to reinstate her as an active member, another month may be lost. Although her name is put on the regular mailing list as quickly as possible, extra handling is required for each issue of the JOURNAL she has missed since September. This, too, delays the regular services at headquarters as well as deprives the member of prompt receipt of the JOURNAL.

We could go on and on with the story of the complications involved in shuffling 20,000 membership cards and magazine addressing plates after they have been divided into an active and an inactive membership list, but they all add up to many good reasons for paying *your* 1953-54 AHEA membership dues now.

TENTATIVE PROGRAM

44th Annual Meeting

American Home Economics Association

YOU Are the Key to Better Relations

Monday

9 a.m.-12 noon AHEA executive committee
9 a.m.-12 noon Meeting of state presidents
12 noon Registration opens
2 p.m. Public relations workshop
7-8 p.m. Program-of-work committee
8-10 p.m. Committee meetings

Tuesday

8 a.m.-5 p.m. Registration
9 a.m.-8 p.m. Visit exhibits
10 a.m. General opening session: YOU Are the Key to Better Personal Relations
2 p.m. Discussion groups
8 p.m. Missouri Night

Wednesday

7:15 a.m. Breakfasts: Phi Upsilon Omicron
Kappa Omicron Phi
8 a.m.-5 p.m. Registration
8:30 a.m.-5 p.m. Visit exhibits
8:30 a.m. Eye opener: TV News in Foods
9:30 a.m. General session: YOU Are the Key to Better Public Relations
1:30 p.m. Department meetings
4:30 p.m. Alumnae teas
6:00 p.m. Alumnae dinners
8:30 p.m. Research meetings: Interpreting Current Home Economics Research

Thursday

7:15 a.m. Omicron Nu breakfast
8 a.m.-5 p.m. Registration
8:30 a.m.-5 p.m. Visit exhibits
8:30 a.m. Eye opener: Today's House and the Things in It
9:30 a.m Division meetings
12:15 p.m. Alumnae luncheons
2:30 p.m. AHEA business and council meeting
7 p.m. Banquet: In the Heart of America

Friday

8 a.m.-2 p.m. Registration
8:30 a.m.-12 noon Visit exhibits
8:30 a.m. Eye opener: Clothing and Style
9:30 a.m. General session: YOU Are the Key to Better Relations in the Greater Community
1 p.m. Consumer interests meeting: Symposium on Rayon and Acetate Standards
3:15 p.m. AHEA council meeting
(State presidents and executive board meetings will be held Saturday.)

WELCOME TO KANSAS CITY

MAXINE ERICKSON
Chairman, Local Arrangements Committee

WE Kansas City area home economists and the Missouri Home Economics Association invite you to attend the 1953 annual meeting of the AHEA in Kansas City, June 23-26.

All of us in the convention city and the state will be delighted to welcome you and assure you that Kansas City has much to make your visit as profitable and pleasant as you could wish.

The programs will be unusually appealing in our handsome air-conditioned Auditorium, where you may also visit the entire AHEA exhibit in cool comfort. On Tuesday evening you may combine an "open evening" for exhibits with our informal "Missouri Night" in the Arena of the Auditorium.

More formal, but equally enjoyable, entertainment is planned for the "In the Heart of America" banquet in one of the hotels on Thursday.

Between meetings, before and after convention, there's much to do in Kansas City. Our Nelson Art Gallery, a 20-minute streetcar ride from downtown, houses the recently acquired Kress Collection, as well as silver, china, antiques, and other paintings. Out-of-door Starlight Theatre opens June 22, with "The Student Prince" running through June 28. Famous Petticoat Lane provides shopping within walking distance of hotels and Auditorium.

The variety of industry in Kansas City offers opportunity for individual exploration according to your interests.

Union Station and the Airport are within five minutes of convention headquarters. Bus and streetcars give good service for 20-cent fares; taxis are reasonable with no charge for a second person.

June in Kansas City is usually warm and dry, in the 90's during the day, cooling at night. But rainy weather is something to come prepared for—just in case!

From Kansas City and Missouri we say: If you are looking for a variety of scenery and entertainment, come to Kansas City for the annual meeting of AHEA, June 23 to 26!

SCENIC MISSOURI

FRANCES KERLEY
President, Missouri Home Economics Association

IF you're driving to the AHEA meeting in Kansas City, you may retrace the route of the westward migration of the pioneers, you may visit some of the country's most beautiful scenery, you may even stay during convention week in one of the delightful hotels in the nearby towns of Independence, Excelsior Springs, Liberty, and others. By train or plane, too, you may visit these famous spots in scenic Missouri.

Highway No. 40 is the most direct route from St. Louis to Kansas City, a distance of 255 miles, which follows in general the historic course of western migration through the Missouri River Valley. This highway has practically been rebuilt and is a two-way route for great distances. Columbia, home of the state university, is about midway between St. Louis and Kansas City.

U. S. highway No. 50 between St. Louis and Kansas City is a less direct (275 miles) but a more leisurely and scenic drive than U. S. No. 40. It comes through Jefferson City, the state capital, and the northern fringe of the Ozarks.

Eighty-eight miles east of Kansas City on No. 50, one may turn south on No. 65 (Sedalia) and within an hour's driving time be in the wooded hills where the damming of the Osage River has created the Lake of the Ozarks. This area is Missouri's most ambitious recreational enterprise. Farther south on No. 65 is Springfield, which is the doorway to the beautiful "Shepherd of the Hills" country and Lake Taneycomo. This is predominantly a resort area. Highways No. 69, 169, and 71 come into Kansas City from the northwest portion of the state. Coming from the south, No. 71 passes through scenic Missouri Ozarks from the Arkansas line along the west boundary of the state while No. 69 runs in eastern Kansas. No. 169 comes into Kansas City through Kansas from the southwest.

Excelsior Springs is 30 miles east and north of Kansas City on U. S. 69. It is a health resort with splendid accommodations.

AHEA Activities

AHEA Cards for Edinburgh Meeting

The American Home Economics Association plans to prepare and issue special identification cards to all members attending the Eighth International Congress on Home Economics in Edinburgh. The cards, similar to those prepared for the Stockholm meeting, will identify the bearer as a member in good standing of the American Home Economics Association and will express the Association's appreciation for any courtesies extended to the holder of the card. The cards will carry the signature of the president of the Association and the official Association seal.

Members who plan to attend the Congress should write to AHEA headquarters for the cards as soon as possible. Mildred Horton, AHEA executive secretary, will head the AHEA delegation to the Congress in Scotland, August 12 to 18, 1953. She will have the assistance of a small advisory committee. To date some 75 persons have written to AHEA headquarters expressing their interest in attending the Congress.

American Council on Education Meeting

BERENICE MALLORY
Home Economics Education Branch
U. S. Office of Education

Miss Mallory attended the meeting reported here for Beulah I. Coon, the AHEA's representative to the American Council on Education.

The meeting of the organization members of the American Council on Education was held in Washington on January 30 and 31. In his address at the opening session Arthur S. Adams, president, stressed the importance of the 142 organization members to the Council. Representing the interests of various professions, various areas of subject matter, various types of institutions, and individual teachers and professors, these organization members serve as a sounding board on matters of educational concern. The council provides a means by which the individual may make his voice heard and may express opinion so that Council decisions may reflect the judgment of the entire educational world. Thus organization members function "both in facilitating communication from its membership to the committees of the Council and from the committees of the Council to its membership."

The agenda for the meeting was formulated after getting from organization members suggestions of topics that would be of particular use to their group. Some of the questions considered by speakers at general sessions were: "How Can We Achieve Adequate Public Understanding of Education?" by Harold R. Benjamin of George Peabody College for Teachers; "How Can We Strengthen the Nation at Home and Abroad through Educated Manpower?" by Gordon K. Chalmers, president of Kenyon College (Ohio); "How Can We Increase the Co-operation of Educational Organizations with Reference to Federal and State Policies?" by Robert L. Stearns, president of the University of Colorado and Council chairman. One general session dealt with educational television.

Conferees worked in sections of their choice for two sessions. In each section there was a chairman, a recorder, panel members who presented papers on the topic, and consultants who took an active part in the discussion. These groups considered the following topics: Meeting the Expanding Needs of Education—Public and Private; Selective Service and ROTC: Their Inter-relationships and Their Impact on Higher Education; Ways and Means of Achieving Public Understanding of Education; The Operation of Public Law 550 [this is concerned with veterans education]; The Education of Women for Expanding Responsibilities; Increasing the Supply of Qualified Teachers; and Preparing for World Responsibilities.

Reports of section meetings included much of interest to home economists in attendance. The group on "preparing for world responsibilities," which the writer joined, stressed the need for finding ways to persuade more citizens to increase their understanding of peoples from other lands by getting to know some of the leaders coming to America each year, the need for recruiting and training persons competent to serve overseas, and the need for education that prepares people to understand and sympathetically adjust to different cultures. Concern was expressed as to why so many sincere, high-minded citizens are identifying themselves with others who are attacking and trying to suppress education for international understanding. It was suggested that a committee of the Council study this puzzling question.

An Invitation to the 1953 National Conference of Social Work

LUISE K. ADDISS
AHEA Representative on the National Conference of Social Work

The 1953 National Conference of Social Work meets in Cleveland, Ohio, during the week of June 1. The AHEA social welfare and public health department is again participating actively in program planning. AHEA is an associate of the Conference.

The National Conference of Social Work is of historical importance to the social welfare and public health department because the early meetings of home economists in social work at the Conference actually became the nucleus on which our AHEA department was based. Participation in the Conference has continued to be an important function of our Association, because through it we are able to make a significant contribution to the content of Conference programs in the area of home economics as this relates to the health and social work fields.

This year our committee has worked co-operatively with the more than 40 associate groups on plans for Conference programs. One of our members has chaired a committee of the combined associate groups which is planning a series of meetings on "Fee Charging." We have also taken responsibility for planning a program on "Nutrition" which is to be one of a series of meetings on "The Aged and the Aging." Under our own sponsorship we plan also to conduct a workshop for home economists and nutritionists in health and welfare agencies.

The programs we have participated in planning are specifically:

Fee Charging in Social Agencies. A general meeting on Tuesday, June 2, at 9:15 a.m. The focus of this meeting will be a discussion of social agency philosophy of fee charging, relating its history and development to current policies and practice with special attention to differences and similarities according to type of agency; the influence of an enlarging community using social and health agency service; a community increasingly able to pay for professional services because of higher wage levels and improved economic conditions; and our American cultural pattern of expecting to pay for goods and services whenever possible. Also to be discussed are the relation between fees and cost of service and interpretation to the community. This meeting will serve as a background for the four group meetings on: "In a Casework Agency," "In a Health Agency," "In a Group Work Agency," and "In an Agency Dealing with Immigration Problems." Kathryn S. Weitzel of the Western Reserve School of Applied Social Sciences will be the home economics discussant in the meeting on "Fee Charging in a Casework Agency."

Older People—A New Focus on Nutrition as a Means of Health Maintenance. In this meeting special emphasis will be given to nutrition as a factor in maintaining good health. Also to be discussed in relation to this are the problems of older people on marginal incomes, relating these to the adequacy of assistance and our insurance program, and general economic conditions in the community; the influence of adequate housing and household equipment, of cultural patterns and food habits, with emphasis on the positive approach that food habits can be changed; and the psychological aspects of food and nutrition. Rosalind Lifquist, food economist, Bureau of Human Nutrition and Home Economics, USDA, will be the principal speaker. Other speakers are to include a doctor and a nutritionist with special orientation to the food and nutrition problems of the aged and the aging.

The Workshop. This year our committee is planning to sponsor a workshop on the general topic of "The Development of Budget Standards for the Use of Social Agencies," with discussion focused on one specific budget item, "Food Standards." We hope to have an outstanding home economist with a broad base of experience in public and private agencies to head the workshop. Miss Lifquist will be the consultant on food economics.

The Booth. We will have a booth at the Conference for which the Cleveland group is taking responsibility under the chairmanship of Mrs. Nancy Lord. Material will be on display which relates particularly to Conference program topics, such as "fee charging, nutrition of older people, and budget standards for social agencies." Members of the department will be available for consultation by appointment during the Conference.

Our committee believes the Conference has much to offer home economists and that you have much to give to the Conference through participation in the meetings and the workshop and volunteering for consultation service at the booth.

Local Health Services Conference

GLADYS STRAWN
Principal Nutritionist
North Carolina State Board of Health
Raleigh, North Carolina

Miss Strawn attended the Middle Atlantic States Conference on Local Health Services in Roanoke, Virginia, November 16 to 18 as a delegate of the North Carolina Home Economics Association. AHEA is an affiliated member of the National Health Council, sponsor of the Conference.

Throughout the conference it was made clear that all of the local health services were dependent upon the people of the community. The needs of the community should be paramount, and in community planning we must begin where the people are. Dr. W. T. Sanger, president of the Virginia Council on Health and Medical Care, aptly pointed out that health is dependent upon nutrition and nutrition is dependent upon agriculture. He also said that health is dependent upon education and emphasized the importance of health education.

At one of the evening meetings, delegates were given an opportunity to express their opinions about local health services. Some of the points that were brought out in these brief statements were:

1. That the public health department is only a part of the local health services
2. That local health services can be developed best through co-operative efforts of all agencies both official and voluntary
3. That it is important to have an adequately trained staff in order that all services of the public health department may be covered
4. The need for developing better understanding on the part of people to help them overcome fear
5. The need for giving consideration to the older age group when planning health services

Delegates selected seven topics for discussion by work groups. In the group discussing problems of the aging and chronically ill this delegate had an opportunity to point out the influence of nutrition in lengthening the productive period of life at the same time that the total life span is increasing. When discussing homes for the aged, the importance of the right kinds of foods was considered along with adequate medical and nursing care.

Public Relations Exchange

High School Students Promote Recruitment

Homemaking students in 37 Illinois high schools are studying careers in home economics. They are investigating job possibilities, home economics courses at colleges, and scholarship opportunities.

The Career Pilot Study, now in its first year, is sponsored by the Illinois Home Economics Association and the Illinois Chain Store Council. It is designed to stimulate pupils' interest, to encourage them to investigate and to act. It calls for the help of the homemaking teacher and home economists in various areas of work. It utilizes local, state, and national resources.

Early last spring a group of leading home economists met to outline the project. Committees were appointed to set up the study, formulate a handbook which would serve as a guide for the students, and to decide on recognition and awards. The project was launched at the Illinois Home Economics Association meeting in November.

The handbook, "A Glimpse of Your Future in Home Economics," explains the project; gives step-by-step procedure for teachers and students; names sources of information, reading references for nine major areas of specialization, and films showing job opportunities in home economics.

Reports from the participating schools indicate that the study is presenting a real challenge. Interest on the part of both teachers and students is exceptionally good.

Many of the students have called on home economists or written to them for information. Films illustrating job opportunities have been shown, and home economists have been invited as guest speakers.

The study is to continue throughout the present school year. Records are being kept and recognition will be given to schools and teachers doing outstanding work in the research project.

A two-day all-expense tour to Chicago will go to the top five schools, with the group, on consultation with the teacher, choosing tour participants. On tour the students will have an opportunity to see leading home economists on the job.

Schools rating from sixth to tenth place will receive a gift for the home economics laboratory.

A certificate of recognition will be given to individual members of a participating group, with a special designation for the top five groups.

The BHNHE Reporting

EMILY C. DAVIS
Bureau of Human Nutrition and Home Economics

Because 4,000 farm families in 42 states have explained in interviews about their home activities and about housing features they like or wish they had, there is now much new information about types of homes most acceptable for rural living.

The BHNHE and 34 state agricultural experiment stations co-operated in these studies of four regions: Northeast, South, North Central, West.

In an interregional report (following separate statistical reports on each region) Bureau housing specialists have brought out points of similarity and difference. As a single example:

At least 90 per cent of farm families in each region do all or most of their washing at home. In the Northeast and West, women prefer a workroom or basement for this task; the majority in North Central states prefer a basement; in the South as many as one-third prefer an outside building.

Published data from the surveys are providing guidance for architects, also for researchers now endeavoring to determine space requirements for various activity and storage areas.

The report, "Housing Needs and Preferences of Farm Families . . . a comparison of data from studies in four regions," Agriculture Information Bulletin 96, may be ordered from the Superintendent of Documents, Government Printing Office, Washington 25, D.C. Price 30 cents.

For a family with a house on its mind—expecting to build or remodel–there is a new edition of "Your Farmhouse . . . cut-outs to help in planning," now listed as Home and Garden Bulletin 22. New planning procedure takes into account relationships between rooms for good traffic routes and work flow.

Order from the Superintendent of Documents, Government Printing Office, Washington 25, D.C. Price 30 cents.

The Proceedings of the National Food and Nutrition Institute, held December 8 to 10, 1952, in Washington, D.C., is now in press. Included are the full texts or summaries of addresses given at the conference and summaries of group discussions. The conference reviewed this country's nutrition situation and discussed ways of strengthening nutrition programs.

For a copy of the proceedings address the Bureau of Human Nutrition and Home Economics, U. S. Department of Agriculture, Washington 25, D.C.

Enzyme researches in universities, industry, and government have brought to Mildred Adams–now on the Bureau's staff–a reputation for broad understanding of these "speeder-uppers" of biochemical change and problems they present to food research. Food technologists holding an institute recently asked her to talk on how to select enzymes for special purposes in food processing (clarifying fruit juices that are turbid because of starch would be an example). She took for illustration three kinds of amylases, or diastases, as industry calls them.

Dr. Adams' paper, outlining major factors to consider and problems to hurdle when in quest of a suitable enzyme, and including original data, has been published in *Food Technology* for January 1953.

She is currently working with enzymes as tools useful in food analysis.

To bring up to date the Bureau's directions for laundering washable wool, samples of pale blue challis have been washed 10 times, in experiments with 5 washing methods and 6 soaps and synthetic detergents of built and unbuilt types now on the retail market.

Says Margaret Furry, the textile chemist in charge:

> These tests show the amount of changes in the wool caused by separate factors in laundering. To generalize: High temperature does most damage to color and to chemical properties of wool. Agitation is more important than temperature of the wash as a cause of shrinking, stretching, and weakening of the fabric. Long soaking, especially with alkaline detergents, increases chemical change in wool. Unbuilt synthetic detergents, because they are not alkaline, are kindest to the wool and do a satisfactory job for cleanliness if the wool is not deeply soiled.

Technical reports of the experiments have been published in *American Dyestuff Reporter,* November 24, 1952 and December 22, 1952 issues.

To homemakers, Miss Furry points out that while most wool requires dry cleaning, many knit wool garments, lightweight flannels, and challis may better be washed than dry-cleaned.

She advises:

Launder washable wools before they are heavily soiled.

Use an unbuilt synthetic detergent in lukewarm water. Wash the garment gently with the least amount of agitation possible–preferably a soak wash–not longer than 10 minutes.

Rinse quickly without agitation.

Abstracts

Education (Elementary, Secondary, and Adult)

Contributed by VIRGINIA B. POULSON
and MARGARET S. JACOBS
Brigham Young University

Are we overprotecting children? L. MOULD. *Childhood Educ.* **29,** No. 5 (Jan. 1953), pp. 220-222.

The family pattern of living is changing; as a result children receive closer and more prolonged supervision. Closely related is the lengthening period of economic dependence of the child. These trends narrow the child's experience. Often children are spared anxieties and are thus deprived of the meanings anxiety experiences hold. Other trends are offering the child opportunity to experience reality in other areas and develop internal controls and a complete acceptance of self.

A significant trend is emphasis on scientific study of child development. There must be decisions as to where legitimate help merges into overprotection. The adult with responsibility for guidance should know the individual pattern of growth —should understand the child. Only then can he estimate how much the child can accomplish alone. Wise decisions will grow from knowledge of what children need supplemented by a mature love for them.—V.B.P.

Self-confidence for competence, B. M. MOORE. *Educ. Leadership* **10,** No. 3 (Dec. 1952), pp. 140-145.

Competence (performance) was the goal of teaching when knowledge of human behavior was limited. Self-confidence, which determines the ability to use knowledge, was not considered at all.

"Self-confidence means a trust in oneself, a knowledge of one's limitations, and one's strengths, a faith in one's ability to meet situations as they arrive."

Ability to spell is competence. Ability to spell plus confidence to use the words correctly in communication is competence plus self-confidence. Neither is fully useful without the other. Each may be dangerous to the personality without the other.

Teachers have a twofold need—to be self-confident about what they do and competent in what they are doing—to assist students to gain self-confidence and competence in their own lives. Skills and knowledge are of greatest value when they are tools for use in a variety of situations for the solution of innumerable problems of living.

In developing self-confidence and competence, the level of expectation for both teacher and student should be kept at a stimulating level and performance must be aided by praise and measured in light of individual differences. Continuous defeat and failure destroy confidence. When a student "bogs down" beyond his capacity to come through on his own power, the teacher should give "gentle lifts" out of tension and prolonged frustration by suggesting a new approach, a shift in problem, or establishment of a new goal. Security—the feeling of belonging and being accepted for the person one is —and adequacy—the feeling of being recognized for what one does—are both necessary for confidence.

Teaching is a complicated business chiefly because of the complexity of the human being. This human complexity is both the challenge and reward in teaching.—M.S.J.

Creative teaching, W. H. KILPATRICK. *Educ. Leadership* **10,** No. 3 (Dec. 1952), pp. 138-139.

Teachers should seek learner creativeness. It gives individuals one of the keenest, finest joys of life. For individuals and groups, the creative solution of problems is the only road to improvement. Civilization is the aggregate of man's successive inventions and creations.

Creativeness is not limited to the gifted. Every problem in life calls for creativeness. Students learning to deal creatively with life's problems are building individual responsibility and group resourcefulness necessary for a democratic civilization. Ideals are built and attained creatively.

The learner can do creative work in suggesting projects for class, choosing from suggestions, helping in constructive planning, solving problems, judging the whole process, and devising and following through on new activities. There are opportunities for creative teaching even in the "subjects" classes.

Departmental subject matter teaching and the idea that research is the sole and proper aim for higher education are the chief factors preventing creative teaching. In secondary schools, the activity program core work should be the next advance if creative teaching is to prevail.—M.S.J.

Family Economics–Home Management

Contributed by RUTH R. HONEY and KATHLEEN A. JOHNSTON
The Pennsylvania State College

Development of accident and health cover described by Equitable Life actuary. *Weekly Underwriter* **168,** No. 3 (Jan. 17, 1953), p. 222.

The number of persons in the nation's population covered by health and accident plans has increased from 5 to 60 per cent during the last 15 years. These coverages were limited to nonoccupational injury and illness and do not duplicate workmen's compensation.

The most popular type of coverage is hospitalization. The midwestern states lead the nation in percentage of population covered, with approximately 74 per cent of their total population having hospitalization insurance.

Surgical insurance is the next most popular type of protection. Blue Cross and Blue Shield no longer lead in the number of persons they cover; other insurance companies have taken the lead and are offering many kinds of coverage other than hospitalization and surgical benefits.

A third broad type of protection offered by Blue Shield and medical societies is called medical insurance. This covers general medical expenses not involving surgery or diagnostic service.

Another popular plan, served in some instances by medical group practice, is comprehensive protection. Under this plan all accidents and sicknesses are treated, but the insured is limited in his choice of physician. This plan avoids the piecemeal approach to the separate problems of hospital, surgical, and medical insurance.

Alternative comprehensive protection is offered by several companies and involves catastrophic insurance to cover major medical expense. This plan is for illnesses of long duration and staggering cost. In addition to one or more basic coverage plans, families may take out this insurance with deductible features with maximum benefits running as high as $5,000.–R.R.H.

Is consumer credit too high? *Newsweek* **41,** No. 3 (Jan. 19, 1953), p. 73.

In an analysis of consumer credit, it seems that the burden of proof is on those who say that the present volume of consumer credit is unsound.

In the early 1930's there was no excessive liquidation of consumer credit when personal incomes declined sharply. There is little practical meaning in the anti-inflationary argument against consumer credit, as wholesale prices in general have been steady or slowly declining during the past two years.

There is no conclusive evidence that the present volume of debt is excessively high in relation to consumer income, as it was 9.1 per cent of income in the third quarter of 1952 and was 9.8 per cent in 1950 and 10.8 per cent in 1940.–K.A.J.

Life insurance betters world position. *Weekly Underwriter* **168,** No. 3 (Jan. 17, 1953), pp. 189, 225.

The Institute of Life Insurance assembled figures on world ownership of life insurance protection and reported an increase of life insurance in various countries of the world ranging from 34 per cent to 1500 per cent since the end of World War II.

In the United States between 1946 and 1952 total life insurance in force rose 67 per cent and ownership per capita increased by 51 per cent. In 1946, total life insurance in force represented 83 per cent of national income, while in 1952 it was 91 per cent.

During the same period, Canadians increased their total insurance 77 per cent, their per capita ownership 56 per cent, and the ratio of life insurance to income rose one per cent. The total insurance in the United Kingdom increased 53 per cent, per capita 50 per cent, and ratio to income 12 per cent. In Sweden, the increase in total was 61 per cent, in per capita 51 per cent, but the ratio to income declined 14 per cent. The total increased in the Netherlands 57 per cent, per capita 42 per cent, and the ratio to income declined 62 per cent. In some countries, the total amount in force has risen by even greater percentages. In Japan, total insurance rose 813 per cent, and per capita ownership 685 per cent. There is no base for statistical comparison in relation to income, but it has probably dropped.

The effectiveness of the increased ownership is offset in part by population changes, fluctuations in national income, and inflationary trends.

These figures indicate that people of many nations have tried to meet the threat of inflation by increasing their family financial protection. In some countries families were able to keep up with the advance of inflation; in other countries they lost ground in the attempt.–R.R.H.

Family Relations and Child Development

Contributed by MARY ELIZABETH KEISTER
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The misuse and abuse of certain mental health concepts, E. J. SIMBURG, MD. *Mental Hygiene* **36,** No. 4 (Oct. 1952), pp. 589-599.

Out of the "exuberance of our insights" into some of the factors that contribute to the development of neuroses, we have been guilty of promoting certain misunderstandings. Some of the concepts that have been abused in the area of child-parent relations are:

1. "Permissiveness," the belief that one must never say "no" to a child

   Obviously it is constructive to offer mutually acceptable substitute activities, but also the child is entitled to know that certain behavior is unwelcome and unacceptable.
2. "Never punish"

   Punitive measures, by and for themselves, rarely are helpful, but children often feel that punishment is just, and when situations are handled without undue fuss on a level comprehensible to them they feel relieved and protected.
3. "Never show a child that you are angry"

   The capacity for anger is necessary to adequate functioning. Often the child senses the hidden anger and is puzzled by the duplicity of the adult. The opportunity to experience another person's anger allows the child to view it in perspective and see that reality provoked it.
4. "Let out your aggressions"

   Healthy aggressions usually discharge themselves in appropriate ways, not in wanton destruction of things and people. An impulse-ridden person gets hurt and hurts others; therefore certain actions should be suppressed.
5. "Frustrations are harmful and should be avoided"

   Growth cannot take place without the mastering of frustrations; when parents intervene to spare children all possible frustrating experiences, children are robbed of the opportunity to master such situations.
6. "The child must come first"

   For the parent, more "value" is invested in the child than in the self and one may well wonder why this is. The child, after all, must measure himself against the parent as a model or ideal.
7. The desirability of a "free atmosphere"

   Too frequently this is synonymous with the attitude of "anything-you-say" or "we-will-do-what-you-want." Passivity, pseudo-giving, pseudo-altruism, are not appreciated in human relations. Children thrive when they see that parents are willing to let them know that moods shift, that when the parent is tired certain activities are unwelcome, that parents make mistakes and are willing to make amends.
8. Concept of the parent as "Public Enemy No. 1"

   The effect of this has been to make conscientious parents needlessly anxious and apprehensive about what they are doing to their children.

Parents' attitudes versus adolescent hostility in the determination of adolescent sociopolitical attitudes, K. HELFANT. *Psychol. Mono.* **66,** No. 13 (1952), 23 pp.

Sociopolitical attitudes are thought to be the result of a complex interweaving of personality and social factors, with social factors probably the most important. Attitudes of 166 high school seniors toward Russia, toward international relations, and toward war were studied.

The same battery of attitude scales was given to their parents, a homogeneous upper middle class group. Measures of hostility in the adolescents consisted of certain scores on the Rosenzweig Picture-Frustration Test and their scores on a scale for the measurement of aggressive impulses.

Small but statistically significant positive correlations were found between: (1) adolescents' and mothers' attitudes toward Russia and toward war; (2) adolescents' and fathers' attitudes toward Russia and toward international relations; (3) adolescents' approval of war and their hostility scores. An inverse relationship was observed between both the measures of hostility and the attitude of friendliness in international relations. Adolescents tended to adopt an attitude somewhat more extreme or emphatic than the attitude of their parents. Adolescents' attitudes toward Russia were significantly more closely related to their parents' attitudes toward Russia than to their own feeling of outwardly directed hostility.

The author hypothesizes that: when social pressures with regard to an attitude are strong, the effect of personality factors is overruled; and when social pressures are not strong, the attitude held is more likely to be consistent with the person's characteristic ways of reacting.

Foods

Contributed by INEZ PRUDENT
Ohio State University

Autosterilization of thermophilic spores in canned foods, W. E. PEARCE and E. WHEATON. *Food Research* **17,** No. 6 (Nov.-Dec., 1952), pp. 487-494.

Flat sour spoilage can be largely prevented by: (1) minimum initial load, (2) process as long as quality can be kept, (3) store in the cool several months before use.

Our taste receptors, L. M. BEIDLER. *Sci. Monthly* **75,** No. 6 (Dec. 1952), pp. 343-349.

Two approaches are possible in the study of taste receptors, one dealing with behavioral responses to stimulation and the other with a molecular explanation of the chemical excitation of the nervous system and the specific sensitivity of the chemoreceptors. The latter approach is given special emphasis in this report. The morphology of taste buds is discussed in so far as it is known, as single taste bud stimulation has not been achieved. The mechanism of taste stimulation involves the reaction of the taste substance with enzymes. Whether each taste bud responds to more than one of the fundamental taste qualities—sweet, sour, bitter, and salt—is not known since each papilla on the tongue contains many taste buds identical in appearance but which probably differ in chemical sensitivity.

When cocaine is applied to the tongue, sensations disappear in this order: pain, bitter, sweet, salty, sour, touch—the order corresponding with the diameter of the nerve fiber.

Only electrolytes can produce the sensation of salty taste, and with salts other than sodium chloride, or common table salt, the taste is mixed with bitter, sour, or sweet in varying degrees. The intensity of sour taste depends not on the pH of the taste substance but on its titratable acidity.

The sweet taste is produced by a variety of un-ionized organic compounds, particularly certain polyhydric alcohols and by some other compounds such as beryllium salts and some amino acids. Whereas sweet sensations are usually associated with nutritionally important foods, the bitter sensations are associated with substances harmful to man. The threshold for quinine hydrochloride is one of the lowest reported for taste, but some olfactory receptors respond to smaller concentrations.

The observation that each sensation has a "saturation level" when stimulated with increasing amounts of a test substance shows that the test substance must react with the receptor in some way; otherwise it would respond to the total number of molecules available to the receptor.

The response to test substances is very rapid. In the rat the latent period is of the order of 50 milliseconds. When the test substance is washed from the tongue with water, the response declines rapidly at a rate characteristic for each substance.

Animals vary greatly in their ability to respond to different chemicals. In man, sensitivity to some chemicals such as phenyl thiourea has been shown to be inherited according to simple Mendelian laws. About 30 per cent of Americans are insensitive to the bitterness of dilute solutions of this chemical.

Taste is dependent upon the chemical structure of the stimulating substances, including the orientation of the branch groups of the molecule. It seems evident that both sweet and bitter substances may react with specific molecules located in the taste end organ and that the reaction is dependent upon the configuration and orientation of all the molecules involved.

One theory postulated to explain how sensation is produced maintains that the taste substances participate in an adsorption process, possible with proteins, at the surface of the receptor. Another theory postulates that the taste substances enter the receptor cell and interact with enzymatic processes. In either event there is a depolarization of the associated nerve fiber. How this electrical change is translated into a sensation of taste is little understood.

The role of temperature in amino acid losses during the prolonged storage of evaporated milk, A. Z. HODSON. *Food Research* **17,** No. 6 (Nov.-Dec., 1952), pp. 467-471.

Because it was known that storage at room temperature for five years causes significant loss of lysine, histidine, and arginine in evaporated milk, this study was planned to find out the effect of high or low storage temperatures on the magnitude of the loss of these acids. Samples stored for two years at 40°F showed no losses of amino acids or subjective quality factors. Samples stored at room temperature showed slight losses of lysine and histidine and great loss of consumer appeal. Those cans stored at 100°F were no longer acceptable as food after two years, and the losses in amino acids were as follows: tryptophane, 12 per cent; lysine, 29 per cent; histidine, 29 per cent; and arginine, 28 per cent. Rat growth studies confirmed these chemical findings.

Nutrition

Contributed by JULIA O. HOLMES
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The relation between vitamin B_{12} deficiency and lactation in rats fed purified casein rations, L. P. DRYDEN, A. M. HARTMAN, and C. A. CAREY. *J. Nutrition* **48,** No. 4 (Dec. 1952), pp. 509-530.

The feeding of certain vitamin B_{12}-deficient, casein-containing (purified) rations to the mother is considered in relation to its effect upon the young during the pre-weaning and the post-weaning periods.

The maternal rats used in this study were of 4 types: (1) those fed a diet of natural foods found to induce satisfactory reproduction and lactation in a breeding colony; (2) those transferred at the birth of their young from the natural food diet and maintained on the purified, vitamin B_{12}-deficient rations during the nursing periods; (3) those continued on the purified rations beyond the initial lactation described in (2); and (4) rats whose ancestors had been fed the purified rations for one or more generations. The B-vitamins (except B_{12}) were supplied either in crystalline form or in yeast.

The feeding of the vitamin B_{12}-deficient, purified diets during the lactation period resulted in smaller weights at weaning time, in smaller weight gains of the young after they were weaned, and in a decreased storage of B_{12} in the kidneys and liver of the young previous to the time that they began to eat solid food. If the rations contained yeast as a source of the B-vitamins, the low pre-weaning weights of the young occurred earlier than if the B-vitamins were supplied in crystalline form. Retaining mothers over several generations on yeast-containing, B_{12}-deficient, purified rations did not result in differences between pre-weaning weights of young or between post-weaning weight gains of young that were markedly greater than those that occurred in the parent generation. The supplementation of the purified rations with vitamin B_{12} during the lactation period allowed the young to gain as rapidly as did the feeding of a diet of natural foods.

Other aspects of the reproductive function of these same rats were discussed in earlier reports. The first of these was concerned with the comparative number of pregnancies and failures to carry a pregnancy to full term, litter size, birth weight of the young, and the extent to which vitamin B_{12} supplementation of the mothers prevented or overcame any defects.

No evidence indicated any noticeable effect of vitamin B_{12}-deficiency upon conception or maintenance of pregnancy. Litters were smaller for the rats receiving no vitamin B_{12}, and the young generally had lower average birth weights. Supplementation of the deficient rations with crystalline vitamin B_{12} had no effect on litter size but did increase birth weights. Birth weights were on the average higher on yeast-containing rations than on yeast-free rations.

The second of these reports dealt with the survival of young from birth to weaning. When the mothers were maintained on the natural food ration until the young were born, the survival of the young during the ensuing lactation was at least as good on the purified rations as on the stock diet; furthermore, vitamin B_{12}-deficient mothers raised as large a proportion of their young to weaning as did vitamin B_{12}-supplemented mothers, that is, from 88 to 98 per cent of those born. When the mothers were continued on the purified vitamin B_{12}-deficient rations for additional matings, however, quite different results were obtained. No young at all survived on some of the yeast-free, vitamin B_{12}-deficient rations, and in none with such rations was there better than 39 per cent survival. When survivals did occur, they were confined to a few litters and a few mothers in each group. With yeast-containing rations, survival of young was better in some cases. The feeding of crystalline vitamin B_{12} as a supplement to the purified rations prevented the early deaths of the young in most cases.

Almost all the deaths of young born to mothers on the purified vitamin B_{12}-deficient rations occurred during the first three or four days after birth. Death was evidently not due to a failure of the mothers to nurse their young, for in most cases considerable amounts of milk were observed in the stomachs of the dead young. In addition, the vitamin B_{12}-deficient mothers were able to raise the young born to mothers on the natural food ration whereas the latter mothers generally failed to raise the young born to mothers on the purified rations. Food intake records showed that the vitamin B_{12}-deficient mothers ate less food while nursing their young than did those receiving vitamin B_{12}.

These studies suggest that vitamin B_{12} functions not only as the extrinsic anti-pernicious anemia factor but also is concerned in the survival of young *in utero* and following birth and in the growth of young during early life.

Housing and Household Equipment

Contributed by VIRGINIA Y. TROTTER
and ARNOLD E. BARAGAR
University of Nebraska

The adjustable house. *House & Home Edition—Mag. of Building* **2,** No. 6 (Dec. 1952), pp. 114-117.

Many kinds of adjustable houses have been tried but only experimentally. A versatile design which comes as close as any to having complete flexibility has recently been put on the market. Unlike most expandable houses, the home described adds and subtracts rooms within the fixed perimeter of the original house.

The builder has made blueprints showing 72 different ways to combine space dividers and feels his system is flexible enough to meet the changing requirements of a family from early marriage to old age.

Radiant glass heating panels, P. R. ACHENBACH. *Heating & Ventilating* **50,** No. 1 (Jan. 1953), pp. 88-91.

This is a research paper dealing with the performance of glass heating panels electrically operated in a test bungalow under controlled conditions of external temperatures. Data are given for vertical temperature difference, observed heat loss of the house, changes in room temperature and power demand during night cooling and morning pickup, and thermal shock tests of glass panels.

Test results show satisfactory heating performance in terms of vertical and horizontal temperature gradients, floor temperatures, and general comfort in a basementless house. Total energy requirements can be slightly less than for conventional methods of heating. With this system, very low differential compensated room thermostats that cycle rapidly are desirable to provide continuous emission of radiant energy. Usually where the electric heating rate exceeds 1½ cents per kwhr, operating cost for a fully insulated house will be higher than for the same uninsulated house heated by coal, oil, or gas.

Warm-air baseboard. *House & Home Edition—Mag. of Building* **2,** No. 5 (Nov. 1952), pp. 150-151.

Perimeter heating with warm-air baseboards is a brand new heating method which is suited to any type of house—slab, crawl space, or basement. Claimed advantages for the system are: quicker response and more heat given to the outside wall than is possible with radiant heat in the floor; more even layer of heat given over windows than is given by the floor-register perimeter system [also, no need to cut rugs to fit]; less smudging, quicker heat, and lower cost permitted than with the hot-water baseboard system. Summer cooling can be easily added.

An even layer of warm air enters the rooms from holes or slots in long, slim 20 to 22 gauge steel registers that replace wood baseboards and spreads over the walls to the outside. Forced warm air is fed to the baseboard registers from a centrally located furnace through either conventional or small ducts. Only a single return near the center of the house is required. By the addition of enough high inside wall ducts, the system can be reversed and used for summer cooling.

Metal baseboards are currently priced at $1.50 to $2 per foot. Except for the baseboards, total installed cost of the warm-air baseboard system is about the same as for the perimeter system with the same furnace and similar ducts.

Housing standards and housing research, R. U. RATCLIFF. *Land Econ.* **28,** No. 4 (Nov. 1952), pp. 329-332.

The term "standards" has acquired many connotations but most frequently implies minimum situations expressed in physical terms. It is the purpose of this discussion to give emphasis to the point that the only standards which have relevance in housing programs are those which have their basic expression in human values and that the concept of standards has meaning at all levels of housing quality.

The builder interprets what he considers is the housing space that will sell most profitably, compromising where he sees fit. The prompt sale of these houses is his verification of choice of planning standards. This verification is not justified in recent years because sales simply reflect the housing shortage. To set a standard in respect to a particular housing attribute, a measure of human reactions to varying degrees of the attribute is necessary.

Houses are built for people. Judgments of housing situations, of space and arrangements, of features and equipment and items, of neighborhoods and environments, are valid only when related to people and families who are exposed to them.

Institution Administration

Contributed by BEATRICE DONALDSON
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Tools for control of food costs, A. B. ATKINSON. *Coll. & Univ. Bus.* **13,** No. 6 (Dec. 1952), pp. 48-49.

This is the second in a series of articles describing a set of food control forms which have been developed as tools for the efficient operation of a food service.

An inventory order sheet was devised to facilitate taking the refrigerator inventory each morning and at the same time give the central office the food order for the following two days. This record shows, in a concise form, the inventories and orders for one week.

The standardized recipe is fundamental to any food cost control system. The recipe work sheet was designed to obtain all the pertinent information necessary for developing a standardized recipe and evaluating the cost of each portion of the food prepared. A market order form is another tool developed for recording quotations obtained by telephone. A chart for checking yield and cost and to determine the shrinkage of processed food was designed to secure all pertinent information with the least possible effort. All records described in this article are illustrated.

Food service in small hospitals: 5. Nutritional and cost accounting, R. C. LIFQUIST and J. HARTMAN. *Modern Hosp.* **79,** No. 6 (Dec. 1952), pp. 118, 119+.

Food is the largest single item of expense in most institutions. The administrator and the dietitian should co-operate in keeping records to provide basic information regarding the kind, quantity, and cost of food used as evidence that the money used for purchasing food has been spent wisely. The procedure which furnishes these facts is referred to as nutritional accounting. To relate the kind of food used to the cost and nutritional adequacy of the food, the following information must be recorded: the meal census, the quantity of the food used, and the cost of the food used. The establishment of a nutritional and cost accounting system should proceed slowly by means of developing and establishing the use of one record at a time.

To appraise the kind, quantity, and nutritional adequacy of the food used, classify foods according to their nutritive value and then record the kind of food used, the unit size, and the number of units used for each of the classifications. This information provides a basis for appraising the nutritional adequacy of the food used, for comparing the kinds and amounts of food used from period to period, for evaluating expenditures for food in relation to the kind and quantities of the various groups used, for developing quantity allowances, and for estimating quantities of food needed in the future.

When expenditures are related to the quantities of foods which are classified according to their nutritive values, they provide a good basis for evaluating the distribution of the food dollar as well as the nutritional adequacy of the food served. Some methods for evaluating the nutritional adequacy of the food used in an institution are: check the number of servings of foods used daily; compare the quantities of food groups used with food allowances that have been developed specifically for the institution; compare quantities of the food in each group used at the institution with a set of quantities for a similar group which are known to be adequate; determine the adequacy of the quantity of foods used on the basis of the nutritive value for the various classifications of foods. Properly maintained records provide the tools with which these evaluations are made, as well as facts which can be used as a basis for determining the future financial needs of the dietary department.

This article includes illustrations of simple records suggested for adaptation and use by any type of institution.

Nation needs to learn essential sanitation facts, W. H. HASKELL. *Inst. Mag.* **32,** No. 1 (Jan. 1953), pp. 8-11.

The role played by industry in providing in-service employee training programs is extremely important. If sanitation training is to be extensive enough to be nationally effective, more individual industries must assume the responsibility for educating their own employees. Many sanitation programs for employees, however, are limited to instruction regarding approved techniques for cleaning, without including the basic principles of sanitation. These result in little improvement in actual sanitation practices. Few employees have had the opportunity to study bacteriology, and some understanding of the basic principles of bacteriology is essential to an appreciation of the important place sanitation occupies in our daily living and working.

Social Welfare and Public Health

Contributed by VIOLET NILSON
and DOROTHY DOTY HEIDEMAN
Chicago Nutrition Forum

Psychologic facts and dietary fancies, H. B. MOORE. *J. Am. Dietetic Assoc.* **28,** No. 9 (Sept. 1952), pp. 789-793.

This article discusses the psychologic facts and fancies of society's feelings about food and how they differ from those of the professional person trained in nutrition.

Food is a symbol that stands for many things besides survival and fuel for the body. Early eating experiences have an effect on the personality of the child. Food is a symbol of reward or punishment, a substitution for other kinds of satisfaction, mark of prestige, and so on. Food, eating, diet, and serving are highly emotionalized areas and cannot be disregarded in nutrition education.

The professionally trained person does have much knowledge and an authoritative, professional position in society. With these and an understanding of society's feelings about food, she can deal with food problems more effectively.—D.H.

A study of lay publications on child feeding, L. WENG. *J. Am. Dietetic Assoc.* **28,** No. 10 (Oct. 1952), pp. 927-932.

Seventy-six pamphlets on child feeding were obtained from public health departments, Extension Services, and the Children's Bureau. They were studied to determine the effectiveness of available reading material in helping parents deal with their everyday feeding problems with children. The pamphlets were examined and evaluated as to content, scientific accuracy, degree of "causality" recognized in discussions of behavior, and reading difficulty.

The results of these studies showed that: (1) The pamphlets mainly emphasized food children need for growth and development and gave some suggestions on guiding the child's eating. Some guidance helps that mothers thought important were not adequately covered. (2) Usefulness of many of the bulletins was limited by their inaccuracies caused by lack of qualification or explanation of positive statements. (3) Behavior, when discussed, was treated in terms of what is done rather than in terms of the cause. (4) The majority of the publications were at the reading level of the average adult in this country.—V.N.

Children and the school lunch program. Report of the Interagency Committee on Nutrition Education and School Lunch. *Child* **17,** No. 3 (Nov. 1952), pp. 40, 45.

The Interagency Committee proposed the following goals for school lunch planning:

1. "It should foster good food habits and safeguard the health of school children." Nutritionally, the noon meal should supply at least one-third of the day's required nutrients. Food should be of such quality and palatability that it will be eaten. The maintenance of good sanitation and a pleasant emotional aura around the food service should be considered equally important.
2. "It should contribute to the education of the child and his family" by: (a) providing a wide range of educational opportunities, (b) including all school children regardless of their ability to pay, and (c) seeking financial aid outside of the community if it is necessary for the maximum benefit to the children. This over-all educational program is best accomplished when administered by school officials and operated by competent workers.
3. "It should be a community-wide enterprise." Planners should take into consideration all aspects of administration and supervision.—V.N.

Can the high cost of eating be solved? I. B. ALLEN. *Today's Health* **30,** No. 11 (Nov. 1952), pp. 18-21.

More than 98 per cent of familes in the United States spend one-third to one-half of their incomes after taxes for feeding the family. A homemaker can cut food bills 15 to 30 per cent by serving more protein food. Since the meat and milk bills are blamed for the high food costs, the solution lies in investigating the entire field of protein foods and their preparation.

Protein foods include over 100 cuts of fresh meats, innumerable varieties of poultry and game birds, fish and sea foods, cheese, and legumes. Milk is the most popular form of protein, and there are 12 different forms of milk.

By using imagination and initiative, inexpensive forms of protein foods can be used. Re-education is needed for family members who demand expensive meats. The practice of buying foods in season, avoiding waste, and making full use of appetizers and interesting desserts can cut costs and yet give appetite appeal.—D.H.

Textiles and Clothing

Contributed by ELEANORE ADAM
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Cornell University

At last—the dawn, F. A. ADAMS. *Modern Textiles* **33,** No. 12 (Dec. 1952), p. 29.

It is hoped that a greater understanding of the man-made fibers may be the result of the series of forums on problems affecting new fibers held by the Textiles Distributors' Institute, Inc. Hundreds of converters, weavers, cutters, and finishers attending the meetings can relay factual and objective information on the comparative values of the new fibers to the retailers and consumers. The problems involved in the new developments in textiles are too big and too new for any individual or small group to have all of the answers, and any unified effort in this direction is greatly needed.

Does scholastic ability predicate success for the textile graduate? [Editorial]. *America's Textile Reptr.* **66,** No. 50 (Dec. 11, 1952), pp. 9, 42.

More and more textile firms indicate that they are searching for people who exhibit aggressiveness, sociability, adaptability, and emotional stability with a certain amount of nervous energy rather than those who are recommended for scholastic attainment. Technical school knowledge is not a requirement of most textile firms. It is believed by many executives that a college graduate with a normal capacity to absorb knowledge can easily be trained for textile work regardless of what his previous studies have been. Almost all firms have their own training programs, and employees must take this training before they can advance to supervisory positions. Frank Bennett, manager of a large textile firm, states, "Unfortunately we have to combat some of the false values that some college professors place on a college education."

Old world skills in new world settings, A. W. WILLIAMS. *Textile Age* **16,** No. 12 (Dec. 1952), pp. 75-77.

Custom-made fabrics such as those used for decorative restoration in Colonial Williamsburg and comparable in every way to those of the old world are being produced by a silk manufacturer. The contribution of this firm to the progress of the textile art has taken two aspects: pioneering with new trends in design and making inspirational reproductions and modifications of the old. Silk is used predominately because of its qualities of tenacity and flexibility suited to the intricate weaving of the Jacquard loom and the fact that it dyes easily, in both the gum and the boiled-off stages.

Screen printing is also used by this firm for decorative silk fabrics. An excellent facsimile of the old-style resist dyeing is obtained by blocking out the area of the design and applying varnish to the screen. Only one application of dye is necessary. Pen and ink is used for fine detail in screens, and fingerprinting is also employed.

Four basic elements are found in the designs: proportion, structure, movement, and beauty of line. The fabrics are sold mainly to interior decorators or decorating departments in stores.

Textile research meeting hears reports on crease resistance, new rayon, clothing comfort factors. *Modern Textiles* **34,** No. 1 (Jan. 1953), pp. 73, 77.

At the meeting of the Textile Research Institute, a new device for determining crease resistance was described. The machine was developed to produce wrinkle patterns in fabric samples large enough for subjective evaluation.

A new type of rayon said to be closer to the natural fibers than any other man-made fiber has been developed in France. It can be made into yarns which are finer, more resistant, and more receptive to dyeing than the best cotton.

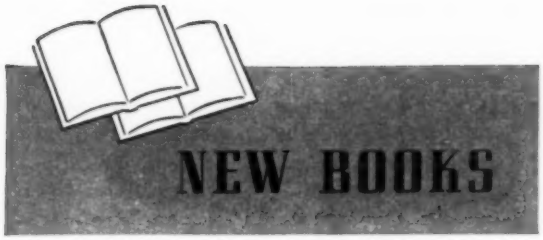
A large chemical firm has been carrying on a long-range research program to determine the comfort qualities of clothing. A progress report on this study was also given at the meeting.

Design procedures developed by U. S. Department of Commerce. *Women's Wear Daily* **86,** No. 7 (Jan. 12, 1953), Sec. 2, p. 86.

Scientists working for the Quartermaster Corps have developed a time-saving design procedure which will make possible the designing of better fabrics with new fibers and fabric treatments. If certain basic dimensions of a weave are known, a graphic procedure makes it easy to determine dimensional changes produced by changes in loom settings and by shrinkage and swelling of the yarn.

New agent held to end spotty dyeing in man-made fabrics. *Women's Wear Daily* **86,** No. 32 (Feb. 16, 1953), p. 16.

Dynade V is a new product claimed to end spotty dyeing of Dacron and Dacron blends by encouraging complete dye solubility. It is composed of a solution of sodium salt combined with suitable surface active agents.



A Year from Now. By MARJORY HALL. New York: William Sloane Associates, 1952, 246 pp., $2.75.

Watching my good friend and business associate Marjory Hall as she wrote books for older teen-aged girls on various careers, I was determined to coax her to write on careers in home economics.

It was not difficult since the author is a homemaker herself, cooks and keeps house with almost effortless efficiency, and handles a successful business career at the same time. She numbers many friends in the home economics field and works with them on many business projects.

The author's research on careers in home economics was complete, detailed, and thorough, and the result is a warm-hearted novel which follows six girls through their first year out of college. The girls are all home economics majors with widely divergent aspirations. One finds success in teaching, one in copywriting for a food account; the others explore various jobs open to the home economics graduate, including newspaper work, food research, fabric design, food testing, and television. The author has written a good story well, one which may lead the undecided teen-ager into a fascinating and satisfactory profession.

It is to be hoped that the breadth of horizons opening for today's home economics graduate will induce the author to follow this first home economics career novel with its sequel, or, even better, a second book on other home economics careers.—SALLY LARKIN ERATH, *H. B. Humphrey, Alley and Richards, Inc., Boston.*

The Development and Scope of Higher Education in the United States. A staff study for the Commission on Financing Higher Education. By RICHARD HOFSTADTER and C. DEWITT HARDY. New York: Columbia University Press, 1952, 254 pp., $3.

This book was written at the request of the Commission on Financing Higher Education to trace the peculiar growth of higher education, explain the scope of its work, and point out some of its limitations.

Part One by Mr. Hofstadter is a short story of the growth of the early schools, colleges, and the universities. He shows how they reflect the changing society and how well they have served it. At the same time certain weaknesses are made clear, such as "mass" higher education, an excess in time and interest in extracurricular activities, excessive emphasis on vocationalism, and a lack of scholarliness.

In Part Two Mr. Hardy points out the high quality of scientific and professional education in colleges and universities and also the need for a different set of values based on present conditions of society. He says, "The highest function that American higher education can perform today is to discover and propagate the kind of thought that will enable the nation to give a significant form to its society and thereby empower its citizens to fulfill their lives." The chapters on "Professional Education" and "The Advancement of Knowledge" will be stimulating to home economics faculty who are seeking ways to improve their teaching and initiate new avenues of research.

Faculty in institutions of higher education will be interested in these thought-provoking essays and cannot help but view their own work with more critical insight.

Mr. Hofstadter is professor of history at Columbia University, and Mr. Hardy is on the staff of the Commission on Financing Higher Education.—MARIE DYE, *Michigan State College.*

Who Should Go to College. By BYRON S. HOLLINGSHEAD. New York: Columbia University Press, 1952, 190 pp., $3.

The author has very ably presented the outstanding positions held by various educators on the problem "who should go to college." From the insight he has gained by working on various educational projects, he is able to analyze each position and to identify the strengths and weaknesses of our present educational system. This book is the report of a study made by Dr. Hollingshead for the College Entrance Examination Board at the request of the Commission on Financing Higher Education. Valuable data are presented as to what factors determine who does attend college and why they attend. These data are then used as a basis for determining who should have the opportunity of attending college and what would be involved in a solution which would make this opportunity possible. Emphasis is placed on developing a plan which would attract a higher percentage of the more capable students and would make it possible for their education to be financed.

The last chapter of the book is on the role of motivation in attendance at post-high-school educational institutions by Robert J. Havighurst and Robert R. Rodgers. This is equally as valuable as

the rest of the book, for according to Dr. Hollingshead many of our most capable students are not motivated to attend college today.

This book should be of value to all home economists who are interested in studying the problems inherent in providing home economics at advanced levels. The book is well written and could be used to stimulate interest in evaluating present programs and planning programs for the future. Persons interested in recruiting capable students who would major in home economics would also find many helpful suggestions.—JUNE COZINE, *Northwest Missouri State College.*

Education for All American Youth: A Further Look. By the EDUCATIONAL POLICIES COMMISSION, NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES. Revised Edition. Washington, D.C.: NEA, 1952, 402 pp., $2.

The first edition of *Education for All American Youth* was written to help schools in postwar educational planning. Two assumptions, on which the writing of this first book was based, proved wrong. We did not have the hoped-for long period of peace, nor did we have a period of economic adjustment accompanied by a depression. This revision is intended to help build a better educational program for youth regardless of the particular social and economic conditions existing at a given time. Such a book should have lasting value. Three chapters are new. The others have few changes other than to bring them up to date.

Chapter I deals with the development of the secondary school, the changing functions of education at this level, and the need for broader educational services to youth. Chapter II emphasizes the responsibilities of secondary schools in the present uncertain national and world situation. Attention is called to the needs of all youth, the special needs of young men in relation to military service, the special needs of young women today, and the necessity for the home, school, and community to share in meeting the needs of youth. The last chapter presents reports from both rural and urban schools dealing with changes in guidance, vocational education, community-school relations, and curriculum and developments in statewide secondary education.

Chapters III to IX, inclusive, deal with the needs of all American youth, conditions presumed to exist in three imaginary but representative secondary school environments shortly after World War II and with a state system of secondary school education.

The important thing throughout this book is the statement of the principles underlying the material presented. The examples given, real or imaginary, are at no time to be considered a blueprint for a program of secondary school education. These principles should be thoughtfully considered by all those actively engaged in or interested in education for youth—this means parents and citizens' groups as well as teachers and administrators.—IVOL SPAFFORD, *Rock Creek, Ohio.*

Sociology in Educational Practice. By CLYDE B. MOORE and WILLIAM E. COLE. Boston: Houghton Mifflin Company, 1952, 440 pp., $4.

This book is the result of a commendable collaborative effort by an educator and a sociologist to cull from the growing mass of sociological theory and research information related to educational policies and practices.

The scope of the book is broad. It deals with the school and its relationship to the basic social institutions—the family, church, economic system, and government. A focal point is the child and the effect of curriculum construction, population changes, and intergroup relationships upon his development. The authors are most successful when they are describing concepts basic to the fields of education and sociology.

Some of the suggestions for applying sociological knowledge to education may be questioned by school administrators and teachers, as, for example, the program designed to promote international understanding. Public school educators may not disapprove of the authors' aims, but they may hesitate to inaugurate similar programs because of fear of opposition by a very vocal segment of public opinion. Possibly, it is for these reasons that the authors devoted only two pages to analyzing the role which pressure groups play in stimulating or vetoing certain educational policies. In fact, one of the weaknesses of the chapter "School and Community Relationships" is, in the opinion of this reviewer, the omission by the authors of techniques for mobilizing public opinion in support of the schools when they are under attack by a special-interest group.

Sociology in Educational Practice, however, should provide valuable information for those home economists unfamiliar with recent developments in sociology. The book is easy to read, as it is written in the popular vein. Each chapter has a list of selected references for those interested in further reading. The book is well indexed.—JOAN ALDOUS, *Kansas State College.*

The Dynamics of Social Action. By SEBA ELDRIDGE. Washington, D.C.: Public Affairs Press, 1952, 119 pp., $2.50.

In an easy-to-read manner, Professor Eldridge has written a challenging book aimed to inform and alert all laymen who would seek to strengthen American democracy.

The book reveals the author's background of active participation and professional study of our changing complex socioeconomic society.

While the book is fairly brief, it is comprehensive and specific in suggested fields of action to all who wish to participate in civic functions. The author states that it is not enough to be proficient in one's occupation. An efficient democratic government depends also on our competency as consumers, citizens, and "communiteers."

The informative chapter on "Working with Special-Interest Groups" shows a similarity of purpose for the majority of our organized groups in society. Fittingly, the final chapter is designed to serve as a stimulus to all individuals who share the benefits of society to assist in bringing about effective legislation through participation in the interest and efforts of the organizations of their choice. One is made to feel that unless he is totally allergic to being a good citizen, there is a niche or sphere in which he may become informed and thus contribute to the age-old effort to improve the economic and social standards of society and thereby strengthen our democratic way of life.—MARGARET LARSEN MANGER, Alexandria, Virginia.

Readings in Marriage and the Family. Edited by JUDSON T. LANDIS and MARY G. LANDIS. New York: Prentice-Hall, Inc., 1952, 460 pp., $5.65.

Readings in Marriage and the Family with the well-qualified Landis team as editors is a valuable contribution to the teaching of courses in the field at the college level. The book contains 69 abbreviated reports of studies and articles from periodicals in the field—research being used where available and challenging, thought-provoking material presented where research is not yet available. The 16 sections cover areas of concern all the way from a look at the contemporary American family and perspective on marrying and the family cycle through dating, predicting marital adjustment, family interaction, to aged family members.

The publishers state that the book can be used as the basic text for a course in marriage and the family if supplemented by lectures and classroom discussion. The reviewer disagrees with this statement; the book lacks color, warmth, and interest as a basic text. It will be a superb aid to supplement and parallel any recent text in the field as outside reading. This would be especially true for colleges where library resources do not include all periodicals reporting research in the field of marriage and the family. At the rate research is going forward in this field, it would seem that such a book as this should be revised or redone about every five years.—MILDRED I. MORGAN, *Florida State University.*

Sex-Character Education. By JOHN A. O'BRIEN. New York: The Macmillan Company, 1952, 212 pp., $2.75.

"Another book on sex education" was a first reaction upon receipt of this book. Perhaps we are too apt to believe that everyone has read all the books and articles written on a topic or, having done so, that they have thought, discussed, and, perhaps, accepted or acted upon the suggestions therein. Many parents and young people do need the information in this book; to them it will not be merely "another book on sex education." It is nontechnical, presented in terms used every day by parents and young people. It is easily read, easily understood.

Many parents are doing a good job in answering the questions of their children about sex and in counseling their older boys and girls. But there continues to be a large group who do not yet realize that children and youth need to get their sex education at home, that there is a need for the first chapters of this book on the why, when, how, and who of sex instruction. These chapters are contributed by the book's author. Two chapters are written for young children; one for five to eight years, and one for eight to eleven.

Other chapters present the works of authors of articles which have appeared in various magazines. They are directed to young people but may be read to advantage by parents, youth workers, and counselors.

The information in this book is not new to people who have been reading and studying in this field. It is new to the people for whom it was written. It can be read by young people to advantage. The list of references to magazine articles will be of help.—ALICE SOWERS, *University of Oklahoma.*

Good Neighbor Recipes. By MAXINE ERICKSON and JOAN M. ROCK. New York: The Bond Wheelwright Company, 1952, 403 pp., $3.

What to Cook for Company. By LENORE SULLIVAN. Ames: The Iowa State College Press, 1952, 512 pp., $3.95.

FROM THE

Editor's Mail

A study of storage requirements for various kinds of household articles and ways to incorporate these storage spaces into existing houses and into plans for new homes was made in the departments of agricultural engineering and home economics at the University of Illinois and is reported by Helen E. McCullough in a well-illustrated 74-page brochure. Miss McCullough's description of research procedures involving the problem of establishing constants will be interesting to research persons, and the remainder of the booklet has value as well for home owners and home planners because of its highly practical statements of modular dimensions of storage space needed for each major type of article that is likely to be stored in the home. Of practical value, too, are the photographs showing storage units built to these dimensions.

Ten pages of the booklet show a specific house plan and ways these many types of storage units may be fitted into it and other houses.

Another practical section of the book is the appendix—eight pages of charts suggesting a variety of combinations of storage units forming partitions between different areas of a house. The booklet is entitled "Space Design for Household Storage," Bulletin 557, and may be ordered from the University of Illinois Agricultural Experiment Station, Urbana, Illinois. Price $1.25.

A picture of home demonstration work—showing its place in adult education, its growth in scope and value to the community and to the nation, and its value to tomorrow's world—is given in a mimeographed 25-page report entitled "A Look at Home Demonstration Work in the U.S.A." Author of the booklet, which is designated Extension Service Circular 483, is Madge J. Reese, field agent, division of field co-ordination of the United States Extension Service. Copies are on file in agricultural college libraries and experiment station libraries and a limited number may be requested from the Extension Service, U. S. Department of Agriculture, Washington 25, D. C.

"Technology in Food Marketing" summarizes in 115 pages the principal developments that have created a national rather than a local market for food during the period from 1920 to 1950 and points out the direction which future research may take in the many areas of the field. It is the result of a study carried out by the United States Department of Agriculture at the request of the Agricultural Research Policy Committee. Because it traces changes in processing, marketing, transportation, and storage, and their effects upon food consumers, it provides reference information of use to teachers and students of home economics. Give number, Agriculture Monograph 14, when ordering from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Price 55 cents.

The department of nutrition at the Harvard University School of Public Health has made studies in the field of nutrition education in three different sections of the country and had them published so that they may serve to "guide and encourage school administrators, teachers, and parents to examine more critically current practice in nutrition education and to plan better educational programs for school children." The 44-page monograph is titled "Nutrition Education in Elementary and Secondary Schools" and is priced at $1.

Members of Harvard University's department of nutrition have also written a 23-page pamphlet which tells in detail and with the aid of meal plans what the term "balanced diet" means. Purchase price of "A Balanced Diet" is 25 cents. Both booklets may be ordered from the Nutrition Foundation, Inc., Chrysler Building, New York 17, N.Y.

"What Is a Good Play School?" is the title of a booklet in which can be found full information about the program, personnel, equipment, and parent co-operation that should be planned for in setting up this service for elementary age children. Because of the booklet's concise style, a busy community leader can gain from it a picture of play school organization in a brief period of time. The introductory part should be particularly interesting to him because of its explanation of what a play school is intended to do for the children of a community through provision of creative activities during out-of-school hours. The concluding page should be mentioned here because it lists services offered by the Play Schools Association, Inc., the nonprofit agency supported by voluntary funds which published the pamphlet. The pamphlet may be ordered from the Play Schools Association, Inc., 119 West 57th Street, New York 19, N.Y. Price 25 cents.

If you have not been among the 10,000 visitors per year who have toured the Agricultural Research Center, a new publication of the U. S. Department of Agriculture may be a good source of information about this 11,000-acre laboratory.

Among the places you visit by means of the descriptions and pictures in the 48-page booklet are the laboratories of the Bureau of Human Nutrition and Home Economics. Title of the booklet is "The Agricultural Research Center," and it may be ordered as Agricultural Handbook No. 43 from the Superintendent of Documents, Government Printing Office, Washington 25, D.C. Price 20 cents.

Because the core curriculum is being attempted in the same school grades in which home economics is most frequently taught, home economists will be interested in a new 100-page booklet describing the nature of this new program and showing how it is carried out successfully in certain schools. It is stated in the foreword that the book can help laymen understand the core program and could have value for research workers because of its documentation, though it was written primarily for high school principals and teachers. This is a publication of the Office of Education, Federal Security Agency, and is entitled "Core Curriculum Development, Problems and Practices." It may be ordered by title and as Bulletin 1952, No. 5, from the Superintendent of Documents, Government Printing Office, Washington 25, D.C. Price 30 cents.

"Financing Adult Education in Selected Schools and Community Colleges," written by adult education specialists in the Office of Education, Federal Security Agency, recognizes the fact that there is no one easy answer to the problems involved in developing sound adult education programs but that there is an increasing demand for them. The booklet gives help in the form of descriptions of methods used in 45 communities in 19 states. This is not an analytical study and does not attempt to show the best practices, but it fills a need for a publication that can point the way for more communities to expand adult education programs. Order by title and number—Bulletin 1952, No. 8—from the Superintendent of Documents, Government Printing Office, Washington 25, D.C. Price 15 cents.

Basic facts on the foods that provide adequate amounts of certain elements important to good nutrition are provided graphically in an attractive and inexpensive pamphlet prepared by the Public Health Service, Federal Security Agency. It is called "Importance of Nutrition to Good Health," Public Health Service Publication No. 162, and is priced at 5 cents per copy.

Other new inexpensive publications of this agency which can aid in teaching a health unit in home economics have these titles and Public Health Service numbers: "Bright's Disease (Nephritis)," No. 206 ($1.50 per 100 copies); "Hemorrhoids (Piles)," No. 189 ($1.25 per 100 copies); "Poison Ivy," No. 194 ($1.25 per 100 copies); and "Hay Fever," No. 208 ($1.75 per 100 copies).

Specify the Public Health Service Publication number when ordering any of the above publications from the Superintendent of Documents, Government Printing Office, Washington 25, D.C.

In "Working Wives and Mothers," Stella B. Applebaum uses actual situations and results of surveys to show the problems and advantages that stem from this present-day movement of women from the status of "housewife with no occupation" to that of "employed."

Formerly a staff member in the department of physiology, public health, and hygiene at Hunter College, Mrs. Applebaum attempts to give a picture of the many different employer attitudes that today's 10,000,000 married women workers meet and describes some of the types of solutions to special problems that husband and working-wife must arrive at together. She advocates the provision of part-time jobs for women to help solve problems of both industry and the women who want or need to work.

This 32-page pamphlet may be ordered as Public Affairs Pamphlet No. 188 from the Public Affairs Committee, Inc., 22 East 38th Street, New York 16, New York. Price 25 cents.

A booklet presenting complete information about du Pont motion pictures describes five that will be of particular value for home economics classes. One tells about the practical contributions of nylon to wearing apparel for all seasons; another answers commonly asked questions about nylon. A third one shows the various steps in the making of fabrics. The movie entitled "Fashion's Favorite," showing the difference between the viscose process rayon and acetate, was produced, so the booklet says, "for home economics and similar clubs, textile schools, colleges, high schools, and department store personnel." The film entitled "Harnessing the Rainbow" shows how colors are applied to fabrics and emphasizes fastness to washing, sunlight, and perspiration. The films may be borrowed free of charge excepting for payment of return postage. Request the booklet describing the films and cards for reservation requests from Motion Picture Distribution, E. I. du Pont de Nemours & Company, Inc., Wilmington 98, Delaware.

NEWS NOTES

GENERAL

Katharine A. Fisher has retired as director of Good Housekeeping Institute after 29 years of service in the position. One of the charter members of the American Home Economics Association honored at the Association's Midcentury Dinner in Boston in 1950, Miss Fisher before joining the *Good Housekeeping* staff had taught at Teachers College, Columbia University and had been head of the School of Household Science at McGill University in Montreal.

Miss Fisher's successor as director of Good Housekeeping Institute is **Willie Mae Rogers,** recently director of home economics of Admiral Corporation, Chicago.

Mrs. Dora S. Lewis, chairman of the home economics department at Hunter College, is a member of the Panel on Voluntary International Services of the National Commission on UNESCO and is also serving as UNESCO chairman for the American Federation of Soroptimist Clubs.

Helen C. Goodspeed, who retired in 1950 as director of the division of home economics of the Philadelphia Public Schools, died on November 15 in Connecticut. Before going to Philadelphia in 1927, Miss Goodspeed had been state supervisor of home economics in Wisconsin and had taught at Indiana (Pennsylvania) State Teachers College, University of Arkansas, and the University of Pennsylvania. Among the first to establish nursery schools as part of the homemaking program in secondary schools, she was co-author of *Care and Guidance of Children* and *Child Care and Guidance.*

Mrs. Bess Viemont Morrison, head of the textiles and clothing division of the Bureau of Human Nutrition and Home Economics, U. S. Department of Agriculture, since 1947, died on January 23, 1953. She was the author of various government publications on consumer use of clothing and textile products. Before joining the Bureau's staff in 1928, she taught at McIntosh High School in Auburn, Indiana, Illinois Women's College, and Kansas State College.

The exhibit of "Women of Achievement" of Detroit, Michigan, at the Detroit Historical Museum from mid-January through February included the following home economists: **Julia P. Grant,** supervisor of home economics in Detroit; **Irene Hickey** of the Michigan Consolidation Gas Company; **Esther McGinnis,** former director of the Merrill-Palmer School and now on the staff of Ohio State University; and **Mrs. Frances G. Sanderson** of Wayne University.

Honors recently bestowed on **E. V. McCollum,** professor emeritus of biochemistry of the School of Hygiene and Public Health, Johns Hopkins University, include: The Samuel J. Crumbine Award "as a token of esteem and honor and for 46 years of Public Health Service for the people of Kansas and the World" by the Kansas Public Health Service, membership in the Dairy Shrine Club of America, and honorary membership in *Sociedad Chilena de Nutricion, Bromotologia y Toxicologia* of Chile.

Summer Trip to Western Europe. The School of Home Economics of the Pennsylvania State College is offering a summer course on Intercultural Studies in Home Economics that includes a five-week tour of Western Europe to study what other countries are doing in the areas of food, clothing, shelter, and education. Leaders will be Doris Myers and Hélène Terré, who for the past four years have conducted the American Home Economists Field Trip to Europe. For further information write Dr. Dorothy Houghton, School of Home Economics, Pennsylvania State College, State College.

INTERNATIONAL

The Home Science Association of India was organized and a constitution adopted during the second organizational meeting of the All-India Home Science Conference held at the Women's Christian College in Madras from September 23 to 26, 1952. Convener of the Conference was Dorothy M. Pearson of the College staff. Speakers included two former AHEA international scholarship students: Theodora Bryce of the Council of Christian Education, Jubbulpore, whose topic was "Handicrafts in Homemaking Education," and Mrs. Rajammal P. Devadas, then of the School of Nursing, New Delhi, but now of the University of Baroda, who spoke on "Goals for Nutrition Study."

Rae P. Vernon, AHEA's 1943-44 international scholarship student from New Zealand at Oregon State College, is teaching at the Teachers' Training College at Auckland.

Theodora Van Schaik, AHEA's 1950-51 Omicron Nu international scholarship student at Michigan State College, who served as secretary and vice-chairman of the executive committee of the International Dietetic Congress held in Amsterdam in July 1952, was appointed by the Dutch Dietetic Association as the representative of the Netherlands on the International Interim Committee for Dietitians organized at the Congress.

Mary Elsie Border has a two-year leave of absence from the Kansas Extension Service for work in Pakistan with the Point 4 Mission of the Technical Co-operation Administration of the Department of State. Her headquarters will be located in Karachi.

Ruth Freegard, who recently retired as chief of the homemaking division of the State Department of Vocational Education in Michigan, is spending the current year at the Japan Women's University in Tokyo on a Fulbright grant to train extension leaders for home economics.

Florence A. Kimmelshue, a member of the Illinois 4-H Club staff since 1937, reported February 1 to begin two years' work on the staff of the Allahabad Agricultural Institute in India.

Emma Harris left Pullman, Washington, on January 30 on a year's leave of absence from the State College of Washington to organize a department of child development at the University of Baroda in India. Working with her will be Heero Rao, a '52 graduate of the College.

Clarissa Rolfs, who had been in the Graduate School at Kansas State College since June 1952, returned in February to Colegio Americano, Pôrto Alegre, Rio Grande do Sul, Brazil,

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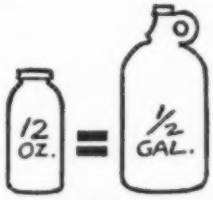

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where she is in charge of home economics courses and director of food service.

STATE ASSOCIATIONS

ALABAMA. New staff members at the University of Alabama include Dr. Margaret Coleman, associate professor of home economics on the College of Education staff, and Jennie Trigg, Eleanor Davis, and Justine Meadow in the School of Home Economics.

CALIFORNIA. Mrs. Marie R. Wilson of Santa Barbara College, University of California, on December 3 gave a talk on "Contemporary Trends in Interior Design and Their Implications in Family Living," illustrated by colored slides, as one of the lectures on the All-College Lecture Series at the College. She was invited to repeat this talk on February 3 as one of a series on the Winter Art Program sponsored by the Santa Maria Art Association and also on March 18 for the Home and Garden Club of Lompoc.

A series of lectures and demonstrations entitled "Every Woman's World" is being offered on Monday afternoons this semester by the home economics department of Mount St. Mary's College, Los Angeles, with the co-operation of Community Services and authorities in their respective fields.

COLORADO. All Colorado HEIB's were invited to inspect the International Harvester Company's entire new western distribution plant at a recent Open House.

Inez Jobe, dietitian for United Air Lines, has been in San Francisco introducing meal service on United's new Convair plane.

DISTRICT OF COLUMBIA. Advice on how to invest and dispose of money was given members of the **D.C. Home Economics Association** at their January dinner meeting. Carmin C. Saccardi, representing a local brokerage firm, pointed out opportunities for the small investor and presented a film, "Fair Exchange," which stressed the difference between investment and speculation and showed the workings of the stock exchange and a brokerage firm. Judge Lucy Howorth described the essentials of a will and emphasized the importance of a will prepared in proper form, however small the estate. Husbands, bosses, and friends joined Association members in this meeting arranged by the homemaking department.

The January meeting of the *Homemaking Department* was held at the Hannah Harrison School. Kathleen Kirby, director, explained that the purpose of the school is to train women who cannot finance their own courses of instruction. Classes cover business office training, clothing construction and alteration, commercial foods, and institutional housekeeping.

"Feasting the Eyes" was the title of the talk presented at the February meeting of the *Home Economics in Business Department* by Mrs. Mabel Anderson of J. Walter Thompson Company, who illustrated her talk with colored slides on food photography.

GEORGIA. The Home Economics in Business Section of the Georgia Home Economics Association is varying its career program this year. Rather than inviting junior and senior home economics students to Atlanta for a two-day program as heretofore, the HEIB's have developed a presentation which they take to colleges upon invitation. Charts showing op-

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Alice Kline and Demetria Taylor, our home economics consultants, have developed some new SUCARYL recipes that we think are out of this world. They're all so good that we decided to put out a whole new recipe booklet. In it, you'll find recipes for cookies, cake, pie, candy, ice cream, pudding and other desserts . . . salad dressing, sauces, relishes and beverages . . . home-canned fruits and jams. Calories are lower than ever, and fat content is reduced to a minimum. This just shows what you can do with a little ingenuity—and a non-caloric sweetener like SUCARYL. As you know, SUCARYL can be *cooked right in* like sugar, leaves no bitter aftertaste in ordinary use. Why not try it? It's supplied by leading pharmacies in both tablet and liquid forms: SUCARYL Sodium Tablets, in bottles of 100 and 1000; and SUCARYL Sweetening Solution, either sodium or calcium form, in 4-fluidounce bottles. Abbott

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portunities for home economics graduates are followed by others showing activities of Georgia HEIB's. At the conclusion of the chart presentation, a talk on "Home Economics Horizons" includes discussion of opportunities for graduates as indicated by a survey of placement bureaus.

Elizabeth Parker of the Georgia Power Company spoke on "The Electric Range, The Keystone of the Design" at the Chicago Electrical Women's Round Table Workshop at the Chicago Edison Company's auditorium on March 27 and 28 and gave an illustrated talk on "Evaluating Home Service Activities" at the Edison Electric Institute's Home Service Conference at the Edgewater Beach Hotel, Chicago, on March 30.

HAWAII. Mrs. Lucile Rust of Kansas State College, who stopped in Honolulu in January en route home from New Zealand, where she had a Fulbright teaching appointment at the University of Otago, spoke at a joint meeting of the Hawaii Home Economics and Dietetic Associations.

IDAHO. "Then and Now" exhibits, showing the difference in equipment between 1902 and 1952, were a feature of the November 20 Open House in the new Home Economics Building at the University of Idaho.

ILLINOIS. Edward Hargrave, vice-president of the Jewel Food Stores, spoke on "Self-service Meat in Chicago" at the January dinner meeting of the **Chicago Home Economists in Business** at the Chicago Bar Association. A film entitled "Packaging Freshness" followed his talk.

A new Directory of Official and Voluntary Health Agencies in Illinois is available in limited quantity from the Bureau of Health Education, Illinois Department of Public Health, Springfield.

The Olin Vocational School, offering a variety of training, including homemaking, industrial sewing, and practical nursing, was dedicated November 6 with ceremonies at the Alton High School. The Olin Foundation donated money for the school.

During the between-semester vacation 26 University of Illinois upperclass home economics students told girls in 34 high schools about college life and opportunities in home economics and extended an invitation to visit the Urbana campus on Hospitality Day, April 25.

Discussion groups for all students on the Illinois State Normal University campus were conducted December 10 and 11 by Harold T. Christensen and Mrs. Marian Nagler of Purdue University.

Dr. Jane E. Werden, recently of Cornell University, was appointed head of the division of textiles and clothing at the University of Illinois on February 1.

Mabel Eugenia Evans, formerly of Tuskegee Institute, is now regional nutritionist for the Wheat Flour Institute, Chicago.

KANSAS. A curriculum in restaurant management has been approved by the Board of Regents in Kansas to be offered in the School of Home Economics at Kansas State College.

Manetta Heidman is on leave from Wayne University to be on the staff of St. Francis Boys' Homes in Salina and Ellsworth. She is spending most of her time at the Salina headquarters.

Mrs. Lucile Rust has returned to Kansas State College after spending the past year teaching and establishing home economics education courses at the University of Otago, Dunedin, New Zealand.

LOUISIANA. "Relationship of the College Home Economics Department and the Community—An Opportunity for Everyone" was the theme of the fifteenth annual meeting of the home economics section of the Louisiana College Conference held at Northwestern State College on March 6 and 7. The program included an address by Troy H. Middleton, president of Louisiana State University, and a panel discussion by faculty members from each of the state colleges and Louisiana State University.

Mrs. Dorothy Moschette and **Martha Hollinger** reported on human nutrition research at the Louisiana Experiment Station at the meeting of Southern Agricultural Workers in New Orleans, February 9 to 11.

MARYLAND. Mrs. Ernestine Becker McCollum of the School of Hygiene and Public Health, Johns Hopkins University, repeated in December the series of ten lectures on nutrition which she first gave last May to officers attending the Naval School of Hospital Administration at Bethesda.

MASSACHUSETTS. High light of the Boston HEIB's 1952-53 program was a workshop on visual aids entitled "The Eyes Have It" on February 7 in the auditorium of the Boston Consolidated Gas Company. The program included "How to Catch Attention with Displays" by Jack Farrell of the Towle Silver Company; "Arresting Posters That Talk" by Frank L. Allen of the Massachusetts School of Art; "Eye Appeal on the Platform" by Muriel Cox, director of the Chamberlain School of Retailing; "Techniques in Making a Television Show" under the supervision of Emma Tighe; and "Your Voice" by Edward W. Palmer of the New England Telephone and Telegraph Company.

During the school year 1951-52, 1905 public and private schools in Massachusetts had the **community school lunch program** under the administration of the Massachusetts Department of Education.

Response by viewers to the TV "How Show" (WBZ-TV, Boston, Wednesdays, 9:30 to 10 a.m.) resulted in increasing the program from 15 to 30 minutes and extending the original schedule. A TV GUIDE certificate of merit was awarded for the program's educational contribution. Subjects have included millinery, slip cover making, fitting and alterations, children's clothing, tray painting, gift wrapping, furniture refinishing, rug hooking, and reupholstery. Clare L. Walsh and Helen J. McClintock, supervisors in the Massachusetts Department of Education, plan the programs and serve alternately as hostess.

The summer conference for vocational teachers will be held at the State Teachers College in Fitchburg from June 29 to July 3. Teacher-training and other work, including a School Lunch Institute, will extend through July 24.

Gertrude Spitz of Brookline, former chairman of the international committee of the Massachusetts Home Economics Association and a member of the HEIB group, died suddenly on December 3, 1952. She was a former president of the Massachusetts Dietetic Association.

Edna Sparkman, a member of the Garland School faculty since 1938, died on December 21.

MICHIGAN. The Home Economics Federation of Greater Detroit has been organized by the Detroit Home Economics Association, the Detroit Dietetic Association, the Lunchroom Managers Association, and the Detroit HEIB's. The groups comprising this large organization plan

two combined meetings each year. At the second, a dinner meeting, on February 16 at the Wayne University Student Center, Mrs. Elizabeth Sweeney Herbert, AHEA president, gave "A Progress Report on Home Economics."

A master's degree program in home economics education was started last fall at Western Michigan College of Education at Kalamazoo.

"Home and School Co-operation in Homemaking Education in Michigan," a recent bulletin by Beatrice O'Donnell, reports part of the findings of a comprehensive study of practices in 23 local homemaking education programs in Michigan. It is available upon request to the School of Education, Michigan State College, East Lansing.

Evelyn Zwemer returned to Michigan State College on January 1 after 15 months' leave of absence. On a Fulbright grant, she taught at Huishoutschool, The Hague, Netherlands, for one year and spent three months in travel on the Continent.

Beulah Coon and **Johnie Christian** of the U. S. Office of Education met with home economics teacher education and city supervisors of Michigan at Michigan State College in November to review research findings and discuss implications for preservice and in-service teacher education.

Mrs. Alba Anderson, supervisor of the homemaking education division in Michigan, retired on January 1.

MINNESOTA. The council of the **Minnesota Home Economics Association** voted at its last meeting to endorse a bill to make the enrichment of bread and flour mandatory in Minnesota. This bill is soon to come up for approval in the state legislature.

At the Association's business meeting at the Radisson Hotel in Minneapolis on March 7, the program featured developments in home safety education, and colored slides of AHEA headquarters were shown.

A committee of Minnesota homemakers under the chairmanship of Charlotte Jacobson has been working on a handbook to be used nationally in aiding groups of homemakers wanting to organize and affiliate with the AHEA. The committee expects copy to be ready for presentation at the annual meeting.

The Faribault County Homemakers will again sponsor three high school girls at the Association's annual Careers Workshop to be held April 16, 17, and 18 in the Twin Cities.

Else Flaatten of Oslo, Norway, AHEA international scholarship student at the University of Minnesota, was the honored guest at the December meeting of the **Twin City Homemakers** at which time she was presented with a check for $50 toward her expenses in the United States.

The Twin City HEIB's invited their executives to a luncheon at the Athletic Club on January 8. William Quinn of the Red Owl Stores spoke on "The Influence of the Home Economist at the Retail Level."

To increase the loan fund which Minnesota home agents have made available to students majoring in home economics in Minnesota colleges, a "talent" sale was held in connection with their annual meeting on December 16 at the Leamington Hotel. Each agent used her "talents" to make articles for sale.

Mrs. Eleanor Gerst Wilson, 1952 president of the Minnesota Dietetic Association, died on November 23.

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Mrs. Eleanor Halderman, recently of the Olmsted and Foley Advertising Agency, on March 1 became foods and equipment editor of *Capper's Farmer,* in Topeka, Kansas.

NEVADA. Mrs. Alice B. Marsh, formerly of the University of Nevada, is now registrar of the Honolulu (Hawaii) Academy of Arts.

NEW MEXICO. An educational program on nutrition in grade schools throughout the state is being promoted by the New Mexico Nutrition Committee in co-operation with the school lunch division of the State Department of Education.

"A Career for You . . . As County Extension Agent in Home Economics" is the title of Circular 235 published by the New Mexico Extension Service.

Catherine Dicks of the New Mexico Department of Education is on leave to serve in the U. S. Office of Education in the promotion of the Future Homemakers of America program. **Berneita Hendrix** is itinerant teacher trainer while Miss Dicks is on leave.

OHIO. "Building a Future on the Past" was the theme of the Ohio Home Economics Association's annual meeting at the Deshler-Wallick Hotel, Columbus, on March 13 and 14. All departments and divisions in the Association have worked this year to secure accurate data on the history of the home economics profession in the state, and this material will be used as background material for molding future plans. Program speakers included Mrs. Elizabeth Sweeney Herbert, AHEA president; Lelia Massey of Ohio Wesleyan University; and Mrs. Florence LeGanke Harris of *The Cleveland Press.*

Cincinnati-Dayton HEIB's. The vocational guidance committee sponsored the group's November meeting at the Kroger Food Foundation to which college home economics students and teachers in the surrounding area were invited. One member from each company represented in the group reported on the types of home economics positions in her company and activities involved. Posters, photographs, pamphlets, instruction books, demonstration outlines, and slides were used in the presentations.

At another meeting, Margaret Robinson of the Cincinnati Gas and Electric Company presented the "Take It Easy Kitchen" and showed two films on the rehabilitation of two handicapped women as accomplished by redesigning their kitchens and homes and readjusting work habits.

"Know Your Neighbor's Job" was the theme of the **Cleveland HEIB's** Career Night in November presented for Cleveland high school vocational counselors and Greater Cleveland college home economics departments.

Edna Weston, recently of *The Ohio Farmer,* is now Mrs. George Kestel of Williston Park, Long Island, New York.

OKLAHOMA. "Education for Living" was the subject of the address made by Mrs. Walter Ferguson, journalist and alumna of the University of Oklahoma, when the new Home Economics Building at the University was dedicated on February 5. On display during the reception and open house were a collection of inaugural dresses of former governors' wives and exhibits of old cook books, textiles, and work of students in the various areas offered in the School of Home Economics. The dedication was part of the 60th anniversary celebration of the establishment of the University.

"Knowledge and Skill in the Business of Working with Others" was the theme of the National Workshop for State Home Demonstration Leaders from January 20 to 30 at Oklahoma A & M College, for which the Oklahoma Extension Service was host. The workshop was sponsored co-operatively by the Farm Foundation and the U. S. Extension Service. Consultants were: John Kurtz of the University of Maryland; Bernice Moore, Hogg Foundation, University of Texas; William Smith, Pennsylvania State College; Ralph Tyler, University of Chicago; and E. Lee Vincent, New York State College of Home Economics, Cornell University.

PENNSYLVANIA. A graduate seminar in home economics journalism was conducted at Drexel Institute of Technology by **Helen P. Hostetter,** on leave this year from Kansas State College.

Elinor Schildt of Finland holds the graduate assistantship in dietetics and institutional administration this year at Drexel.

New home economics faculty members at the Pennsylvania State College include **Dr. Dorothy Houghton,** formerly of Columbia University, assistant dean in charge of resident instruction; **Dr. Ruth Ayres,** recently managing director of the National Consumer-Retailer Council, head of the department of clothing and textiles; and **Bernice Chambers,** formerly of New York University, who succeeded M. Elizabeth Westgate upon her retirement on February 1. Miss Chambers will develop the teaching program in merchandising.

Mary Catherine Cole of Harrisburg is now nutritionist for the Pennsylvania State Department of Health.

Eugenia Hoffert of Philadelphia has been appointed director of home economics by the Campbell Soup Company.

Lydia Tarrant, in charge of the home economics extension program in Pennsylvania, was program chairman for the National Workshop for State Home Demonstration Leaders in January at Oklahoma A & M College. She is also chairman of the home economics extension section of the Association of Land-Grant Colleges and Universities.

Blanche Coit of Towanda retired December 31 after 32 years with the Pennsylvania Extension Service, all but four of them spent in Bradford County in charge of the adult and 4-H homemaking programs.

WASHINGTON. Jessie M. Boeckenheuer, who served in Germany for nine months as a U.S. specialist in the field of home economics under the Educational Exchange Program of the Department of State, has returned to her position as Whatcom County home agent for the Extension Service.

WISCONSIN. Speakers during Farm and Home Week from February 2 to 6 at the University of Wisconsin and their topics included: Dena Cederquist of Michigan State College, who spoke on "Food Facts and Fads"; Mrs. Elaine Knowles Weaver, Ohio State University, "Choose Equipment to Simplify Your Living"; Dorothy Dyer, University of Minnesota, "What Do Adolescents Expect of Parents?"; Helen Allen, University of Wisconsin, "Crafts in Today's Living"; and Beth Peterson, E. I. du Pont de Nemours & Company, "From Calico to Fiber E."

Stella Patton has retired from the staff of the University and been given emeritus status.

New staff members at the University include Dr. Beatrice Donaldson and Dr. Maxine McDivitt, associate professors of foods and nutrition; and Mrs. Hazel B. Paschall, associate professor of textiles and clothing.

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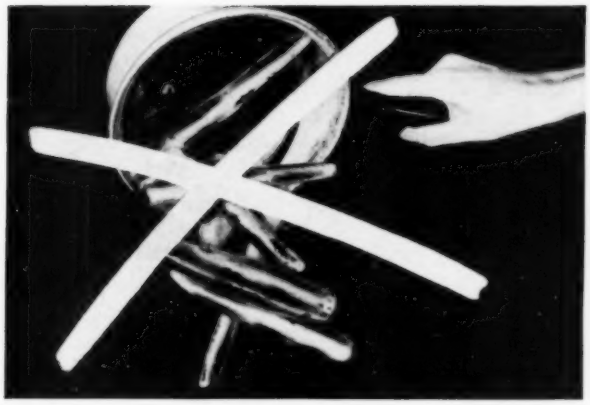

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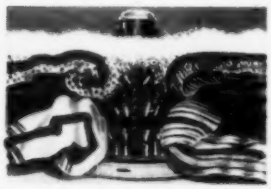

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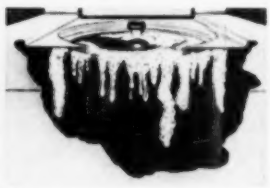

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